INDEXES

The subject and author indexes which appear in this issue were prepared by a system employing typewritten IBM cards, Xerography, and a sequential-card camera. A discussion of the method can be found in AIP Report No. AIP/DRP 63-3, *A Suggested Method for Producing Journal Indexes*

It will be noted that one result of the system is full display at each indexing point of paper-title, author(s), and both Russian [in brackets] and English translation volume, page, and year. There are no references to "See something (or someone) else." All articles are arranged under headings in chronological order of publication.

A full list of subject categories is shown below. The form of the subject index follows that of the Russian version in that each paper is indexed under one category only. References with L are Letters to the Editor.

Comment on the index is invited, and should be addressed to the editor or to Mrs. Pauline Atherton, Associate Director, Documentation Research Project, the American Institute of Physics, 335 East 45 Street, New York 17.

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Secondary Reactions of Astatine Production During Bombardment of Bi and Pb with 3 to 10 BeV Protons. (E) N. S. Mal'tseva, V. N. Mekhedov, and V. N. Rybakov—18, 585 (1964) [45, 852 (1963)]

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Short Range Products From Nuclear Disintegrations Induced by Protons with Energies Between 2 and 9 GeV. (E) P. A. Gorichev, O. V. Lozhkin, and N. A. Perfilov—18, 1222 (1964) [45, 1784 (1963)]

Fragment Production From the Interaction of 7.3-BeV π^- Mesons With Emulsion Nuclei. (E) Yu. F. Gagarin and N. S. Ivanova—18, 1228 (1964) [45, 1793 (1963)]

Formation of Fast Residual Nuclei. (E) V. I. Bogatin, O. V. Lozhkin, and Yu. P. Yakovlev—18, 1420L (1964) [45, 2072L (1963)]

NUCLEAR REACTIONS AND SCATTERING AT MEDIUM AND LOW ENERGIES (Experiment)

Radiative Capture of Resonance Neutrons by the Pr^{141} Nucleus. (E) Jan Urbanec—18, 68 (1964) [45, 93 (1963)]

Polarization of Elastically Scattered 6.5-MeV Deuterons. (E) Yu. A. Nemilov and L. A. Pobedonostsev—18, 76 (1964) [45, 103 (1963)]

Elastic Scattering of Deuterons by Nitrogen, Oxygen, and Argon. (E) O. F. Nemets, F. Picard, L. I. Slyusarenko, and V. V. Tokarevskiĭ—18, 583 (1964) [45, 850 (1963)]

Gamma Ray Spectra Following Resonance Capture of Neutrons. (E) V. Ratynskiĭ, K. G. Ignat'ev, I. V. Kirpichnikov, F. N. Belyaev, and S. I. Sukhoruchkin—18, 598 (1964) [45, 870 (1963)]

Spin Dependence of Density of Resonance Levels. (E) K. G. Ignat'ev, I. V. Kirpichnikov, and S. I. Sukhoruchkin—18, 602 (1964) [45, 875 (1963)]

(He^3, α) Reaction on C^{12} and Mg^{24} Nuclei. (E) V. M. Pankratov and I. N. Serikov—18, 627 (1964) [45, 910 (1963)]

Inelastic Scattering of 14-MeV Neutrons on Mg^{24}. (E) B. A. Benetskiĭ, Yu. P. Betin, and Ya. Gonzatko—18, 640 (1964) [45, 927 (1963)]

Neutron Resonances in Bromine. (E) D. Zeliger, N. Iliescu, Kim Hi San, D. Longo, L. B. Pikel'ner, and É. I. Sharapov—18, 889 (1964) [45, 1294 (1963)]

Measurement of Asymmetry in the $N^{14}(d, p)N^{15}$ Reaction with Elastically Scattered Deuterons. (E) Yu. V. Gofman, V. N. Dobrikov N. I. Zaika, A. V. Mokhnach, and O. F. Nemets—18, 906 (1964) [45, 1317 (1963)]

Emission of Three α Particles in Interactions Between B^{10} Ions and Light Nuclei. (E) S. N. Shumilov, A. P. Klyucharev, and N. Ya. Rutkevich—18, 934 (1964) [45, 1356 (1963)]

Angular Distribution of the Polarization of Neutrons from the $C^{12}(d, n)N^{13}$ Reaction. (E) N. P. Babenko, I. O. Konstantinov, and Yu. A. Nemilov—18, 959 (1964) [45, 1389 (1963)]

Neutron Polarization in the Reactions $T(p, n)He^3$ and $D(d, n)He^3$. (E) N. V. Alekseev, U. R. Arifkhanov, N. A. Vlasov, V. V. Davydov and L. N. Samoĭlov—18, 979 (1964) [45, 1416 (1963)]

Elastic Scattering of 3.4—4.2 MeV Protons by Ni^{62} and Ni^{64} Isotopes. (E) V. Ya. Golovnya, A. P. Klyucharev, and B. A. Shilyaev—18, 1183 (1964) [45, 1727 (1963)]

Proton Capture Reaction on the Atomic Nuclei Na^{23}, Mg^{26}, Al^{27} and P^{31}. (E) I. Berkes, I. Dézsi, L. Keszthelyi, and I. Fodor—18, 1186 (1964) [45, 1731 (1963)]

Investigation of Neutron Resonances in Rh^{103}. (E) Wang Nai-yen, I. Vizi, V. N. Efimov, E. N. Karzhavina, Kim Hi San, A. B. Popov, L. B. Pikel'ner, M. I. Pshitula, T. Stadnikov, Ch'eng Ling-yen, É. I. Sharaparov, I. I. Shelontsev, N. Yu. Shirikova, and Yu. S. Yazvitskiĭ—18, 1194 (1964) [45, 1743 (1963)]

Asymmetry of Double Scattering of Neutrons on Helium. (E) P. S. Ot-stavnov, G. N. Lovchikova, and V. I. Popov—18, 1202 (1964) [45, 1754 (1963)]

Scattering of Protons With Energies Below 5 MeV on Ne^{20}. (E) H. Hulubei, J. Francz, N. Martalogu, N. Scintei, M. Ivascu, A. Berinde, and I. Neamu—18, 1248 (1964) [45, 1822 (1963)]

Intensities of Gamma Transitions to the Ground Rotational Band in Neutron Resonances of the $Gd^{155}(n, \gamma)Gd^{156}$ Reaction. (E) L. S. Danelyan, B. V. Efimov, S. K. Sotnikov, and V. Kakhramanov-Dzhazairov—18, 1274 (1964) [45, 1858 (1963)]

NUCLEAR REACTIONS, DISINTEGRATIONS, SCATTERING (Theory)

Investigation of Nucleon Induced Deuteron Disintegration by the Diagram Summation Technique. (T) V. V. Komarov and A. M. Popova—18, 151 (1964) [45, 214 (1963)]

Empirical Behavior of the (n, p) Cross Section for 14—15 MeV Neutrons. (E) V. N. Levkovskiĭ—18, 213 (1964) [45, 305 (1963)]

Phase Shifts of Coulomb pp Scattering. (T) N. P. Klepikov—18, 261 (1964) [45, 376 (1963)]

On a Certain Experimental Possibility of Studying the Mechanism of the (t, d) Reaction. (T) V. V. Balashov—18, 371 (1964) [45, 541 (1963)]

Slow π^--Meson Capture by Light Nuclei in the Correlational Nuclear Model. (T) G. M. Shklyarevskiĭ—18, 480 (1964) [45, 698 (1963)]

Effect of External Fields on Angular Correlations in Consecutive Electromagnetic Transitions. (T) L. Zastavenko and M. Podgoretskiĭ—18, 485 (1964) [45, 706 (1963)]

Range Straggling of Charged Particles in Various Substances. (T) Do In Seb—18, 540 (1964) [45, 787 (1963)]

On the Mechanism of Total Nuclear Disintegration. (T) Yu. A. Berezhnoĭ, A. P. Klyucharev, Yu. N. Ranyuk, and N. Ya. Rutkevich—18, 713 (1964) [45, 1030 (1963)]

Scattering of Electrons by Nuclei According to the α Particle Model of the Nucleus. (T) V. Vadia, E. Inopin, and M. Yusef—18, 802 (1964) [45, 1164 (1963)]

Relation of Total Cross Sections for ½ + ½ → 0 + 0 Reactions to the Intrinsic Parities of the Particles. (T) S. M. Bilen'kiĭ and R. M. Ryndin—18, 823 (1964) [45, 1192 (1963)]

Determination of the Interaction Between Nucleons from Electron Scattering by Nuclei. (T) V. P. Yakovlev—18, 840 (1964) [45, 1218 (1963)]

Compound-elastic Scattering in Elastic Scattering of 5.45 MeV Protons on Nickel Isotopes. (T) G. F. Timoshevskiĭ, R. A. Vanetsian, A. P. Klyucharev, and E. D. Fedchenko—18, 1340 (1964) [45, 1951 (1963)]

NUCLEAR REACTIONS ON MULTIPLY CHARGED IONS

Angular Distributions of Multiply Charged Particles Produced by 75—350 MeV Protons. (E) M. M. Makarov—18, 41 (1964) [45, 56 (1963)]

Two-neutron Transfer During N^{15} Ion Bombardment of Separated $Zr^{90,92,94}$ Isotopes. (E) V. V. Volkov, L. Pomorski, J. Tys, and J. Wilczynski—18, 617 (1964) [45, 897 (1963)]

Ratio of Cross Sections for the Production of the Sc^{44} and Sc^{44m} Isomer Pair in Heavy Ion Reactions. (E) V. V. Bredel', B. A. Gvozdev, and V. A. Fomichev—18, 622 (1964) [45, 904 (1963)]

NUCLEAR SPECTRA (α, β, γ) (Experiment)

Lifetime of the 0.570 MeV Level in the Te^{122} Nucleus. (E) Yu. K. Shubnyĭ—18, 316 (1964) [45, 460 (1963)]

An Investigation of Gamma Rays from Cs^{140}. (E) E. A. Zherebin, A. I. Krylov, V. I. Polikarpov, and N. N. Yuzvuk—18, 319 (1964) [45, 464 (1963)]

Measurement of the Lifetime of the Levels in the Eu^{152}, Ag^{110}, and Cs^{134} Nuclei Produced in (nγ)-Reactions. (E) A. M. Berestovoĭ, D. M. Kaminker, and I. A. Kondurov—18, 613 (1964) [45, 892 (1963)]

On the Nature of Highly Excited Levels in W^{182}. (E) S. V. Starodubtsev, R. B. Begzhanov, and S. L. Rakovitskiĭ—18, 635 (1964) [45, 921 (1963)]

Observation of Radioactive Decay with Emission of Protons. (E) V. A. Karnaukhov, G. M. Ter-Akop'yan, L. A. Petrov, and V. G. Subbotin—18, 879L (1964) [45, 1280L (1963)]

Millisecond Thallium Isomers. (E) A. G. Demin, Yu. P. Kushakevich, E. A. Makoveev, I. M. Rozman, and A. F. Chachakov—18, 925 (1964) [45, 1344 (1963)]

Alpha Decay of Curium Isotopes. (E) B. S. Dzhelepov, R. B. Ivanov, V. G. Nedovesov, and V. P. Chechev—18, 937 (1964) [45, 1360 (1963)]

Investigation of the Decay of Eu^{147} and Eu^{148} by the Sum Coincidence Method. (E) V. R. Burmistrov and A. D. Vangaĭ—18, 951 (1964) [45, 1380 (1963)]

Investigation of Radiation from Al^{28m}, S^{31}, Ti^{43}, and Mn^{57}. (E) S. S. Vasil'ev and L. Ya. Shavtvalov—18, 955 (1964) [45, 1385 (1963)]

Collective Effects in the Cs^{131} Nucleus. (E) G. A. Vartapetyan, A. G. Khudaverdyan, and T. A. Garibyan—18, 1178 (1964) [45, 1720 (1963)]

Lifetime of the 4⁺ (2310 keV) Level in Ti^{48}. (E) A. F. Akkerman, V. L. Kochetkov, V. N. Chekanov, V. V. Suvorov, and A. K. Shtol'ts—18, 1218 (1964) [45, 1778 (1963)]

New Data on Alpha Decay of Americium Isotopes. (E) S. A. Baranov, V. M. Kulakov, and V. M. Shatinskiĭ—18, 1241 (1964) [45, 1811 (1963)]

Determination of the Ratio of the Probabilities for Electron Capture and Positron Decays of Sb^{115} With the Aid of a Scintillation Gamma Spectrometer. (E) N. A. Vartanov—18, 1286 (1964) [45, 1875 (1963)]

New Short-lived Isomers of Ruthenium and Tellurium. (E) A. G. Demin and I. M. Rozman—18, 1417L (1964) [45, 2067L (1963)]

NUCLEAR STRUCTURE (Theory)

Determination of the Mutual Arrangement of Nucleon Associations in a Nucleus by the Directed Orbital Method. (T/E) S. Matthies, V. G. Neudachin, and Yu. F. Smirnov—18, 79 (1964) [45, 107 (1963)]

Quadrupole Resonances of Atomic Nuclei. (T/E) V. G. Shevchenko, N. P. Yudin, and B. A. Yur'ev—18, 128 (1964) [45, 180 (1963)]

Spatial Correlation of Nucleons in Light Nuclei. (T/E) N. A. Vlasov—18, 160 (1964) [45, 228 (1963)]

Contribution to the Statistical Theory of Nuclear Level Spacing. (T) A. V. Malyshev—18, 221 (1964) [45, 316 (1963)]

Quasistatic Drop Model of the Nucleus as an Approximation to the Statistical Model. (T) V. M. Strutinskiĭ and A. S. Tyapin—18, 664 (1964) [45, 960 (1963)]

A Phenomenological Approach to the Theory of the Nucleus. (T) A. B. Migdal and A. I. Larkin—18, 717 (1964) [45, 1036 (1963)]

Accuracy of the Generalized Hartree-Fock Method in Nuclear Physics. (T) I. N. Mikhaĭlov—18, 761 (1964) [45, 1102 (1963)]

Effect of Nuclear Deformations on the Isotope Shift of Spectral Lines. (T) F. A. Babushkin—18, 1022 (1964) [45, 1479 (1963)]

Calculation of the Spectrum of the Nucleus $_{88}Rn^{210}$. (T) I. M. Band—18, 1056 (1964) [45, 1535 (1963)]

Equilibrium Shape of a Nucleus According to the Drop Model With Variable Surface Tension. (T) V. M. Strutinskiĭ—18, 1298 (1964) [45, 1891 (1963)]

Stability of Equilibrium States of the Nucleus in the Drop Model. (T) V. M. Strutinskiĭ—18, 1305 (1964) [45, 1900 (1963)]

PHOTONUCLEAR REACTIONS

Cross Section of the Rh^{103} (γ, p) Reaction. (E) B. S. Ishkhanov, É. N. Kornienko, Yu. I. Sorokin, V. G. Shevchenko, and B. A. Yur'ev—18, 29 (1964) [45, 38 (1963)]

Angular Distribution of Photoneutrons from Bi^{209}. (E) É. S. Anashkina—18, 279 (1964) [45, 404 (1963)]

Theory of Photodisintegration of Light Nuclei With Emission of Fast Deuterons. (T) V. V. Balashov and V. N. Fetisov—18, 365 (1964) [45, 532 (1963)]

Photoproduction of π Mesons on Nucleons and Fermion Regge Poles. (T) M. P. Rekalo, V. G. Gorshkov, and G. V. Frolov—18, 462 (1964) [45, 672 (1963)]

Inelastic Scattering of γ Rays on Ag^{107}. (E) O. V. Bogdankevich, B. S. Dolbilkin, L. E. Lazareva, and F. A. Nikolaev—18, 606 (1964) [45, 882 (1963)]

The π + N → π + γ + N Reaction and the Constant for Pion-pion Photoproduction. (T) V. A. Meshcheryakov, L. L. Nemenov, and L. D. Solov'ev—18, 820 (1964) [45, 1188 (1963)]

Regge Poles in Photoproduction Amplitude. (E) A. V. Berkov, E. D. Zhizhin, V. D. Mur, and Yu. P. Nikitin—18, 1091 (1964) [45, 1585 (1963)]

Cross Section for Gamma-ray Absorption by Carbon in the Giant Resonance Region. (E) N. A. Burgov, G. V. Danilyan, B. S. Dolbilkin, L. E. Lazareva, and F. A. Nikolaev—18, 1159 (1964) [45, 1693 (1963)]

PLASMA (Theory)

The Effect of Collisions on the Excitation Spectrum of a System of Electrons. (T) Yu. Ya. Polyak and V. M. Eleonskiĭ—18, 114 (1964) [45, 159 (1963)]

Nonlinear Theory of the Drift Instability of an Inhomogeneous Plasma in a Magnetic Field. (T) A. A. Galeev and L. I. Rudakov—18, 444 (1964) [45, 647 (1963)]

One Possibility of Plasma Instability. (T) V. P. Silin—18, 559L (1964) [45, 816L (1963)]

Typical Structure of a Toroidal Magnetic Field. (T) A. I. Morozov and L. S. Solov'ev—18, 660 (1964) [45, 955 (1963)]

Instability of One-dimensional Packets and Absorption of Electromagnetic Waves in a Plasma. (T) A. A. Andronov and V. Yu. Trakhtengerts—18, 698 (1964) [45, 1009 (1963)]

Contribution to the Theory of Oscillations of a Weakly Inhomogeneous Plasma. (E) V. P. Silin—18, 733 (1964) [45, 1060 (1963)]

Theory of High Frequency Heating of Plasma. (T) K. N. Stepanov—18, 826 (1964) [45, 1196 (1963)]

Turbulent Diffusion of a Rarefied Plasma in a Strong Magnetic Field. (T) B. B. Kadomtsev—18, 847 (1964) [45, 1230 (1963)]

Nonlinear Effects in Plasma Resonance. (T) A. V. Gurevich and L. P. Pitaevskiĭ—18, 855 (1964) [45, 1243 (1963)]

Negative Absorption in a Nonequilibrium Hydrogen Plasma. (T) L. I. Gudzenko and L. A. Shelepin—18, 998 (1964) [45, 1445 (1963)]

Plasma Oscillations of π Electrons in Molecules. (T) A. V. Tulub—18, 1001 (1964) [45, 1450 (1963)]

Nonlinear Oscillations and Some Effects Due to a Longitudinal Current in a Plasma. (T) V. I. Petviashvili—18, 1014 (1964) [45, 1467 (1963)]

Parametric Generation of Electromagnetic Waves in a Magnetoactive Plasma. (T) L. A. Ostrovskiĭ and N. S. Stepanov—18, 1018 (1964) [45, 1473 (1963)]

Transport Phenomena in a Plasma in a Strong Magnetic Field. (T) Yu. M. Aliev and A. R. Shister—18, 1035 (1964) [45, 1499 (1963)]

Drift Instability in a Dense Plasma. (T) L. V. Mikhaĭlovskaya and A. B. Mikhaĭlovskiĭ—18, 1077 (1964) [45, 1566 (1963)]

Quasilinear Theory of Instability of a Plasma with an Anisotropic Ion Velocity Distribution. (T) V. D. Shapiro and V. I. Shevchenko—18, 1109 (1964) [45, 1612 (1963)]

Electrodynamic Interaction of a Group of Charges During the Scattering of Radiation. (T) V. V. Yankov—18, 1122 (1964) [45, 1634 (1963)]

Resonance Properties of Inhomogeneous Plasma Structures. (T) V. B. Gil'denburg—18, 1359 (1964) [45, 1978 (1963)]

PLASMA, GAS-DISCHARGE (Experiment)

Investigation of a Pulsed Discharge in a High-velocity Air Stream. (E) B. V. Kalachev—18, 59 (1964) [45, 83 (1963)]

The Determination of Deuterium Plasma Density by Means of a Tritium Ion Beam. (E) B. M. Gokhberg, I. K. Kikoin, A. S. Knyazyatov, V. V. Mal'tsev, and G. A. Otroshchenko—18, 295 (1964) [45, 428 (1963)]

Acceleration of Ions in Plasma Beams. (E) M. V. Nezlin and A. M. Solntsev—18, 576 (1964) [45, 840 (1963)]

Experimental Observation of Landau Damping in a Plasma. (E) V. V. Dolgopolov, A. I. Ermakov, N. I. Nazarov, K. N. Stepanov, and V. T. Tolok—18, 866L (1964) [45, 1260L (1963)]

Investigation of Transverse (Hall) Diffusion in a Plasma of Inert Gases. (E) É. I. Urazakov and V. L. Granovskiĭ—18, 883 (1964) [45, 1285 (1963)]

Instability of a Plasma in a Magnetic Field Upon Transition From Low to High Pressures. (E) A. R. Akhmedov and A. A. Zaĭtsev—18, 977 (1964) [45, 1414 (1963)]

Spectroscopic Investigation of Turbulence Heating of a Plasma. (E) S. P. Zagorodnikov, G. E. Smolkin, and G. V. Sholin—18, 1268 (1964) [45, 1850 (1963)]

POLARIZATION, NUCLEAR

Dynamic Proton Polarization at 0.5°K. (E) B. S. Neganov, L. B. Parfenov, V. I. Lushchikov, and Yu. V. Taran—18, 273L (1964) [45, 394L (1963)]

QUANTUM ELECTRODYNAMICS

Anomalous Resonance Spin Flip of a Particle in a Magnetic Field. (T) Kh. A. Simonyan and Yu. F. Orlov—18, 123 (1964) [45, 173 (1963)]

Polarization Phenomena in the Compton Scattering on a Moving Electron and the Possibility of Obtaining Beams of Polarized Photons. F. R. Arutyunyan, I. I. Gol'dman, and V. A. Tumanyan—18, 218 (1964) [45, 312 (1963)]

Emission of a Photon by a Fast Particle Interacting with Elementary Excitations in Matter. (T) M. I. Ryazanov—18, 232 (1964) [45, 333 (1963)]

Concerning One Reaction with Colliding Electron Beams. (T) V. D. Mikhaĭlov—18, 265L (1964) [45, 383L (1963)]

Depolarization of Relativistic Electrons in a Magnetic Field. (T) S. S. Sannikov—18, 546 (1964) [45, 797 (1963)]

Asymptotic Expression for the Total γγ Scattering Cross Section at High Energies. (T) V. D. Mur—18, 727 (1964) [45, 1051 (1963)]

Electromagnetic Emission of Atomic Electrons During Beta Decay. (T) A. I. Greĭser—18, 782 (1964) [45, 1133 (1963)]

Regge Trajectory for the Positronium Atom. (T) Yu. M. Malyuta—18, 804 (1964) [45, 1167 (1963)]

The Absorption of Electromagnetic Waves by Neutrinos. (T) V. N. Tsytovich—18, 816 (1964) [45, 1183 (1963)]

Infrared Singularities of Matrix Elements in Scalar Electrodynamics. (T) L. D. Solov'ev and Yu. Ya. Yushin—18, 830 (1964) [45, 1202 (1963)]

The Scattering of Light by Light. (T) V. M. Arutyunyan, F. R. Arutyunyan, K. A. Ispiryan, and V. A. Tumanyan—18, 873L (1964) [45, 1270L (1963)]

Screening in Pair Conversion. (T) V. G. Gorshkov and K. Ridel'—18, 1103 (1964) [45, 1603 (1963)]

The Doubly Logarithmic Approximation in Quantum Electrodynamics. (T) G. A. Milekhin and E. S. Fradkin—18, 1323 (1964) [45, 1926 (1963)]

QUANTUM FIELD THEORY, THEORY OF STRONG INTERACTIONS

Relativistically Invariant Transformations in Wave Function Space. (T) A. A. Borgardt—18, 86 (1964) [45, 116 (1963)]

Transverse and Longitudinal States of Boson Fields and Dibaric Particles. (T) A. A. Borgardt—18, 90 (1964) [45, 123 (1963)]

Field Theory with Nonlocal Interaction. II. The Dynamical Apparatus of the Theory. (T) D. A. Kirzhnits—18, 103 (1964) [45, 144 (1963)]

On Interacting Fields with Definite Spin. (T) V. I. Ogievetskiĭ and I. V. Polubarinov—18, 166 (1964) [45, 237 (1963)]

Fermion Regge Poles and the Compton Effect. (T) V. G. Gorshkov, M. P. Rekalo, and G. V. Frolov—18, 199 (1964) [45, 285 (1963)]

πN Scattering Partial Waves with Account of $\pi\pi$ Interaction. (T) P. S. Isaev, V. I. Lend'el, and V. A. Meshcheryakov—18, 205 (1964) [45, 294 (1963)]

Trajectories of Regge Vacuum Poles. (T) B. V. Geshkenbeĭn and B. L. Ioffe—18, 240 (1964) [45, 346 (1963)]

Baryon Momentum Spectrum in Inelastic Collisions Between Fast Pions and Nucleons. (T) V. S. Barashenkov, D. I. Blokhintsev, E. K. Mihul, I. Patera, and G. L. Semashko—18, 263L (1964) [45, 381L (1963)]

Restrictions on the Values of the Coupling Constants and the Vertex Part for the Interaction of Three Particles in Quantum Field Theory. II. (T) B. V. Geshkenbeĭn and B. L. Ioffe—18, 382 (1964) [45, 555 (1963)]

Polarization Phenomena in Scattering of π-Mesons on Nucleons and the Fermion Regge Poles. (T) M. P. Rekalo—18, 409 (1964) [45, 595 (1963)]

The Hypothesis of Regge Poles in Quantum Field Theory and the Threshold Singularities of Inelastic Processes. (T) L. A. Khalfin—18, 433 (1964) [45, 631 (1963)]

Comparison of Elastic πp and pp Scattering on the Basis of a Model with Three Regge Poles. (T) V. P. Kanavets, I. I. Levintov, and B. V. Morozov—18, 467 (1964) [45, 679 (1963)]

On the Theory of the Neutral Vector Field with Spin 1. (T) V. I. Ogievetskiĭ and I. V. Polubarinov—18, 487 (1964) [45, 709 (1963)]

Some Consequences of the Long Lifetime of η and ω Mesons. (T) V. G. Grishin and M. I. Podgoretskiĭ—18, 538 (1964) [45, 783 (1963)]

Renormalization Constants and Bound States in a Nonrelativistic Model of Field Theory. (T) M. A. Braun—18, 647 (1964) [45, 936 (1963)]

Interacting Spin 1 Fields and Symmetry Properties. (T) V. I. Ogievetskiĭ and I. V. Polubarinov—18, 668 (1964) [45, 966 (1963)]

New Method of Investigation of Singularities of Feynman Diagrams. (T) A. P. Rudik and Yu. A. Simonov—18, 703 (1964) [45, 1016 (1963)]

On Processes Determined by Fermion Regge Poles. (T) V. Gribov, L. Okun', and I. Pomeranchuk—18, 769 (1964) [45, 1114 (1963)]

Regge Shrinkage of the Diffraction Peak and the Role of Multimeson Interactions. (T) E. L. Feĭnberg and D. S. Chernavskiĭ—18, 861 (1964) [45, 1252 (1963)]

Physical Region of the Five-point Function in Terms of Five Invariants. (T) V. P. Pavlov—18, 1105 (1964) [45, 1606 (1963)]

Effect of Annihilation on Peripheral Nucleon-Antinucleon Interactions. (T) D. S. Chernavskiĭ—18, 1072 (1964) [45, 1558 (1963)]

On Inelastic Processes Due to Various Types of Moving Poles. (T) I. M. Dremin and D. S. Chernavskiĭ—18, 1334 (1964) [45, 1943 (1963)]

Field Theory With Nonlocal Interaction. III. Diagram Technique. (T) D. A. Kirzhnits—18, 1390 (1964) [45, 2024 (1963)]

QUANTUM-MECHANICAL GENERATORS AND AMPLIFIERS

Four-Millimeter Molecular Beam Generator Based on the $1_{01}-0_{00}$ Transition in the CH_2O Molecule. (E) A. F. Krupnov and V. A. Skvortsov—18, 74 (1964) [45, 101 (1963)]

Negative Temperature States in Chemical Reactions. (T/E) A. N. Oraevskiĭ—18, 126 (1964) [45, 177 (1963)]

Study of Pulsed Laser Generation in Neon and in Mixtures of Neon and Helium. (E) G. G. Petrash and I. N. Knyazev—18, Ruby Laser with Generation Duration of ~ 10 Milliseconds. (E) V. K. Konyukhov, L. A. Kulevskiĭ, and A. M. Prokhorov—18, 588 (1964) [45, 857 (1963)]

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Resonance Excitation of an Isomer State in Ag^{107} with a Mean Lifetime of 63 Seconds. (E) G. E. Bizina, A. G. Beda, N. A. Burgov, and A. V. Davydov—18, 973 (1964) [45, 1408 (1963)]

BEGZHANOV, R. B.
Resonance Scattering by Sn^{116} and Cu^{65} Nuclei of Gamma Rays from Solid and Liquid Sources. (E) D. K. Kaipov, Yu. K. Shubnyĭ, Yu. G. Kosyak, and R. B. Begzhanov—18, 305 (1964) [45, 443 (1963)]
On the Nature of Highly Excited Levels in W^{182}. (E) S. V. Starodubtsev, R. B. Begzhanov, and S. L. Rakovitskiĭ—18, 635 (1964) [45, 921 (1963)]

BEKKER, B. I.
Measurement of the Cross Section of the Reaction C^{12}(p, pn)C^{11} at 9 BeV. (E) B. I. Bekker, V. S. Pantuev, V. A. Sviridov, and M. N. Khachaturyan—18, 872L (1964) [45, 1269L (1963)]

BELOV, K. P.
Shift of the Ferromagnetism-antiferromagnetism Transition Point in Dysprosium Under Hydrostatic Pressure. (E) K. P. Belov, S. A. Nikitin and A. V. Ped'ko—18, 20 (1964) [45, 26 (1963)]

BELYAEV, F. N.
Gamma Ray Spectra Following Resonance Capture of Neutrons. (E) V. Ratynskiĭ, K. G. Ignat'ev, I. V. Kirpichnikov, F. N. Belyaev, and S. I. Sukhoruchkin—18, 598 (1964) [45, 870 (1963)]

BELYAKOV, V. A.
A Hyperon Production by 7–8 GeV Negative Pions in Hydrogen. (E) V. A. Belyakov, V. I. Veksler, N. M. Viryasov, I. Vrana, Kim Hi In, E. N. Kladnitskaya, A. A. Kuznetsov, A. Mikhul, Nguyen Dinh Tu, M. I. Solov'ev, T. Hofmokl, and Ch'eng Ling-Yen—18, 64 (1964) [15, 88 (1963)]
Polarization of Λ Hyperons Produced in π^--C Interactions at 7 GeV. (E) V. A. Belyakov, Wang Yung-Chang, V. I. Veksler, N. M. Viryasov, Tu Yuan-T'sai, Kim Hi In, E. M. Kladnitskaya, A. A. Kuznetsov, Nguyen Din Tu, V. I. Penev, and M. I. Solov'ev—18, 66 (1964) [45, 90 (1963)]

BENETSKIĬ, B. A.
Inelastic Scattering of 14-MeV Neutrons on Mg^{24}. (E) B. A. Benetskiĭ, Yu. P. Betin, and Ya. Gonzatko—18, 640 (1964) [45, 927 (1963)]

BERESTOVOĬ, A. M.
Measurement of the Lifetime of the Levels in the Eu^{152}, Ag^{110}, and Cs^{134} Nuclei Produced in (γ, ny)-Reactions. (E) A. M. Berestovoĭ, D. M. Kaminker, and I. A. Kondurov—18, 613 (1964) [45, 892 (1963)]

BEREZHNOĬ, Yu. A.
On the Mechanism of Total Nuclear Disintegration. (T) Yu. A. Berezhnoĭ, A. P. Klyucharev, Yu. N. Ranyuk, and N. Ya. Rutkevich—18, 713 (1964) [45, 1030 (1963)]

BEREZNYAK, N. G.
The Equilibrium Diagram for the He^3-He^4 Liquid-crystal System. (E) N. G. Bereznyak, I. V. Bogoyavlenskiĭ, and B. N. Esel'son—18, 335 (1964) [45, 486 (1963)]

BERINDE, A.
Scattering of Protons With Energies Below 5 MeV on Ne^{20}. (E) H. Hulubei, J. Francz, N. Martalogu, N. Scintei, M. Ivaşcu, A. Berinde, and I. Neamu—18, 1248 (1964) [45, 1822 (1963)]

BERKES, I.
Proton Capture Reaction on the Atomic Nuclei Na^{23}, Mg^{26}, Al^{27} and P^{31}. (E) I. Berkes, I. Dézsi, L. Keszthelyi, and I. Fodor—18, 1186 (1964) [45, 1731 (1963)]

BERKOV, A. V.
Regge Poles in Photoproduction Amplitude. (E) A. V. Berkov, E. D. Zhizhin, V. D. Mur, and Yu. P. Nikitin—18, 1091 (1964) [45, 1585 (1963)]

BETIN, Yu. P.
Inelastic Scattering of 14-MeV Neutrons on Mg^{24}. (E) B. A. Benetskiĭ, Yu. P. Betin, and Ya. Gonzatko—18, 640 (1964) [45, 927 (1963)]

BIBERMAN, L. M.
Semi-empirical Method of Calculating the Cross Section for Elastic Scattering of Slow Electrons by Atoms. (T) L. M. Biberman and G. E. Norman—18, 1353 (1964) [45, 1970 (1963)]

BILEN'KIĬ, S. M.
Relation of Total Cross Sections for $\frac{1}{2} + \frac{1}{2} \rightarrow 0 + 0$ Reactions to the Intrinsic Parities of the Particles. (T) S. M. Bilen'kiĭ and R. M. Ryndin—18, 823 (1964) [45, 1192 (1963)]

BIZINA, G. E.
Resonance Excitation of an Isomer State in Ag^{107} with a Mean Lifetime of 63 Seconds. (E) G. E. Bizina, A. G. Beda, N. A. Burgov, and A. V. Davydov—18, 973 (1964) [45, 1408 (1963)]

BLANK, A. Ya.
Galvanomagnetic Phenomena in an Alternating Electromagnetic Field. (T) F. G. Bass, A. Ya. Blank, and M. I. Kaganov—18, 747 (1964) [45, 1081 (1963)]

BLOKHINTSEV, D. I.
Baryon Momentum Spectrum in Inelastic Collisions Between Fast Pions and Nucleons. (T) V. S. Barashenkov, D. I. Blokhintsev, E. K. Mihul, I. Patera, and G. L. Semashko—18, 263L (1964) [45, 381L (1963)]

BOBASHEV, S. V.
Excitation of Balmer Hydrogen Lines Upon Passage of H^+, H_2^+, and H_3^+ Through Helium and Neon. (E) S. V. Bobashev, E. P. Andreev, and V. A. Ankudinov—18, 1205 (1964) [45, 1759 (1963)]

BOGATIN, V. I.
Formation of Fast Residual Nuclei. (E) V. I. Bogatin, O. V. Lozhkin, and Yu. P. Yakovlev—18, 1420L (1964) [45, 2072L (1963)]

BOGDANKEVICH, O. V.
Inelastic Scattering of γ Rays on Ag^{107}. (E) O. V. Bogdankevich, B. S. Dolbilkin, L. E. Lazareva, and F. A. Nikolaev—18, 606 (1964) [45, 882 (1963)]

BOGOYAVLENSKIĬ, I. V.
The Equilibrium Diagram for the He^3-He^4 Liquid-crystal System. (E) N. G. Bereznyak, I. V. Bogoyavlenskiĭ, and B. N. Esel'son—18, 335 (1964) [45, 486 (1963)]

BOLOTOV, V. N.
Efficiency of a Spark Chamber for Recording Charged Shower Particles. (E) V. N. Bolotov and M. I. Devishev—18, 1151L (1964) [45, 1680L (1963)]

BOLOTOVSKIĬ, B. M.
Radiation Emitted by Fast Particles in a Nonstationary Inhomogeneous Medium. (T) K. A. Barsukov and B. M. Bolotovskiĭ—18, 211 (1964) [45, 303 (1963)]

BORGARDT, A. A.
Relativistically Invariant Transformations in Wave Function Space. (T) A. A. Borgardt—18, 86 (1964) [45, 116 (1963)]
Transverse and Longitudinal States of Boson Fields and Dibaric Particles. (T) A. A. Borgardt—18, 90 (1964) [45, 123 (1963)]

BOROVIK, E. S.
Deviation from Kohler's Rule in Pure Aluminum. (E) E. S. Borovik, V. G. Volotskaya, and N. Ya. Fogel'—18, 34 (1964) [45, 46 (1963)]

BOROVIK-ROMANOV, A. S.
Antiferromagnetic Resonance in $MnCO_3$. (E) A. S. Borovik-Romanov, N. M. Kreĭnes, and L. A. Prozorova—18, 46 (1964) [45, 64 (1963)]

BOYADZHYAN, N. G.
Energy Spectrum of Nuclear-active Particles in Extensive Air Showers. (E) Kh. P. Babayan, N. G. Boyadzhyan, N. L. Grigorov, É. A. Mamidzhanyan, Ch. A. Tret'yakova, and V. Ya. Shestoperov—18, 288 (1964) [45, 418 (1963)]

BRANDT, N. B.
Investigation of the De Haas-Van Alphen Effect in Bismuth at Ultra-low Temperatures. (E) N. B. Brandt, T. F. Dolgolenko, and N. N. Stupochenko—18, 908 (1964) [45, 1319 (1963)]

BRAUN, M. A.
Renormalization Constants and Bound States in a Nonrelativistic Model of Field Theory. (T) M. A. Braun—18, 647 (1964) [45, 936 (1963)]

BREDEL', V. V.
Ratio of Cross Sections for the Production of the Sc^{44} and Sc^{44m} Isomer Pair in Heavy Ion Reactions. (E) V. V. Bredel', B. A. Gvozdev, and V. A. Fomichev—18, 622 (1964) [45, 904 (1963)]

BRYUKHANOV, V. A.
The Mössbauer Effect on Sn^{119} Nuclei in a Vanadium Matrix. (E) V. A. Bryukhanov, N. N. Delyagin, and Yu. Kagan—18, 945 (1964) [45, 1372 (1963)]

BULAEVSKIĬ, L. N.
Temperature Dependence of the Shape of the Domain Wall in Ferromagnetics and Ferroelectrics. (T) L. N. Bulaevskiĭ and V. L. Ginzburg—18, 530 (1964) [45, 772 (1963)]

BUNYATOV, S. A.
Investigation of the $\pi^+\pi^-$ Interaction at Low Energy by the Chew-Low Method. (T) Yu. A. Batusov, S. A. Bunyatov, Do In Seb, V. M. Sidorov, and V. A. Yarba—18, 629 (1964) [45, 913 (1963)]

BURGOV, N. A.
Resonance Excitation of an Isomer State in Ag^{107} with a Mean Lifetime of 63 Seconds. (E) G. E. Bizina, A. G. Beda, N. A. Burgov, and A. V. Davydov—18, 973 (1964) [45, 1408 (1963)]

Cross Section for Gamma-ray Absorption by Carbon in the Giant Resonance Region. (E) N. A. Burgov, G. V. Danilyan, B. S. Dolbilkin, L. E. Lazareva, and F. A. Nikolaev—18, 1159 (1964) [45, 1693 (1963)]

BURMISTROV, V. R.
Investigation of the Decay of Eu^{147} and Eu^{148} by the Sum Coincidence Method. (E) V. R. Burmistrov and A. D. Vangaĭ—18, 951 (1964) [45, 1380 (1963)]

BUROV, I. V.
Some Magnetic Properties of a Gadolinium Single Crystal. (E) V. I. Chechernikov, Iuliu Pop, I. V. Burov, and E. M. Savitskiĭ—18, 595 (1964) [45, 867 (1963)]

BYSTRITSKIĬ, I.
Contribution of ^3P and ^3F Waves to Meson Production in 660-MeV pp-collisions. (T/E). I. Bystritskiĭ and R. Zul'karneev—18, 806 (1964) [45, 1169 (1963)]

CHACHAKOV, A. F.
Millisecond Thallium Isomers. (E) A. G. Demin, Yu. P. Kushakevich, E. A. Makoveev, I. M. Rozman, and A. F. Chachakov—18, 925 (1964) [45, 1344 (1963)]

CHAPLIK, A. V.
Quantum Transitions to a Continuous Spectrum, Due to Adiabatic Perturbations. (T) A. V. Chaplik—18, 1046 (1964) [45, 1518 (1963)]

CHASHKIN, Yu. R.
Measurement of the Specific Heat C_V of Oxygen Near the Critical Point. (E) A. V. Voronel', Yu. R. Chashkin, V. A. Popov, and V. G. Simkin—18, 568L (1964) [45, 828L (1963)]

CHASNIKOV, I. Ya.
Identification of Particles by the Photographic Emulsion Technique. (E) I. Ya. Chasnikov, Z. V. Anzon, Zh. S. Takibaev, and I. S. Strel'tsov—18, 23 (1964) [45, 29 (1963)]

CHECHERNIKOV, V. I.
Some Magnetic Properties of a Gadolinium Single Crystal. (E) V. I. Chechernikov, Iuliu Pop, I. V. Burov, and E. M. Savitskiĭ—18, 595 (1964) [45, 867 (1963)]

CHECHEV, V. P.
Alpha Decay of Curium Isotopes. (E) B. S. Dzhelepov, R. B. Ivanov, V. G. Nedovesov, and V. P. Chechev—18, 937 (1964) [45, 1360 (1963)]

CHEKANOV, V. N.
Lifetime of the 4^+ (2310 keV) Level in Ti^{48}. (E) A. F. Akkerman, V. L. Kochetkov, V. N. Chekanov, V. V. Suvorov, and A. K. Shtol'ts—18, 1218 (1964) [45, 1778 (1963)]

CHENG Ling-Yen
$\bar{\Lambda}$ Hyperon Production by 7—8 GeV Negative Pions in Hydrogen. (E) V. A. Belyakov, V. I. Veksler, N. M. Viryasov, I. Vrana, Kim Hi In, E. N. Kladnitskaya, A. A. Kuznetsov, A. Mikhul, Nguyen Dinh Tu, M. I. Solov'ev, T. Hofmokl, and Ch'eng Ling-Yen—18, 64 (1964) [45, 88 (1963)]

Investigation of Neutron Resonances in Rh^{103}. (E) Wang Nai-yen, I. Vizi, V. N. Efimov, E. N. Karzhavina, Kim Hi San, A. B. Popov, L. B. Pikel'ner, M. I. Pshitula, T. Stadnikov, Ch'eng Ling-Yen, É. I. Sharapov, I. I. Shelontsev, N. Yu. Shirikova, and Yu. S. Yazvitskiĭ—18, 1194 (1964) [45, 1743 (1963)]

CHERNAVSKIĬ, D. S.
Regge Shrinkage of the Diffraction Peak and the Role of Multimeson Interactions. (T) E. L. Feĭnberg and D. S. Chernavskiĭ—18, 861 (1964) [45, 1252 (1963)]

Effect of Annihilation on Peripheral Nucleon-Antinucleon Interactions. (T) D. S. Chernavskiĭ—18, 1072 (1964) [45, 1558 (1963)]

On Inelastic Processes Due to Various Types of Moving Poles. (T) I. M. Dremin and D. S. Chernavskiĭ—18, 1334 (1964) [45, 1943 (1963)]

CHERNITSYN, A. I.
Spin Echo in a Local Field. (E) V. D. Korepanov, A. I. Chernitsyn, and R. A. Dautov—18, 266L (1964) [45, 385L (1963)]

CHERNOV, G. M.
Azimuthal Distribution in Jets Produced by Cosmic-ray Particles in Photographic Emulsions. (E) Sh. Abduzhamilov, S. A. Azimov, L. P. Chernova, G. M. Chernov, and V. M. Chudakov—18, 281 (1964) [45, 407 (1963)]

CHERNOVA, L. P.
Azimuthal Distribution in Jets Produced by Cosmic-ray Particles in Photographic Emulsions. (E) Sh. Abduzhamilov, S. A. Azimov, L. P. Chernova, G. M. Chernov, and V. M. Chudakov—18, 281 (1964) [45, 407 (1963)]

CHIKOVANI, G. E.
Track Spark Chamber. (E) V. A. Mikhaĭlov, V. N. Roĭnishvili, and G. E. Chikovani—18, 561L (1964) [45, 818L (1963)]

CHKHAIDZE, L. V.
Observation of $K_2^0 \to \pi^+ + \pi^- + \pi^0$ Decays. (E) M. Kh. Anikina, O. N. Gogitidze, M. S. Zhuravleva, A. A. Kozlov, D. M. Kotlyarevskiĭ, Z. Sh. Mandzhavidze, A. N. Mestvirishvili, D. Neagu, E. O. Okonov, N. I. Petrov, A. M. Rozanova, V. A. Rusakov, G. G. Takhtamyshev, L. V. Chkhaidze, Wu Tsun-fan, and A. A. Tserelov—18, 323 (1964) [45, 469 (1963)]

CHUDAKOV, V. M.
Azimuthal Distribution in Jets Produced by Cosmic-ray Particles in Photographic Emulsions. (E) Sh. Abduzhamilov, S. A. Azimov, L. P. Chernova, G. M. Chernov, and V. M. Chudakov—18, 281 (1964) [45, 407 (1963)]

CHUNAEV, O. N.
Coherent Interaction Length of Light Waves in a Nonlinear Medium. (E) S. A. Akhmanov, A. I. Kovrigin, R. V. Khokhlov, and O. N. Chunaev—18, 919 (1964) [45, 1336 (1963)]

CHUPIS, I. E.
On Threshold Absorption of Sound in a Uniaxial Antiferromagnet. (T) M. I. Kaganov and I. E. Chupis—18, 1088 (1964) [45, 1581 (1963)]

DANELYAN, L. S.
Intensities of Gamma Transitions to the Ground Rotational Band in Neutron Resonances of the $Gd^{155}(n, \gamma)Gd^{156}$ Reaction. (E) L. S. Danelyan, B. V. Efimov, S. K. Sotnikov, and V. Kakhramanov-Dzhazairov—18, 1274 (1964) [45, 1858 (1963)]

DANILYAN, G. V.
Cross Section for Gamma-ray Absorption by Carbon in the Giant Resonance Region. (E) N. A. Burgov, G. V. Danilyan, B. S. Dolbilkin, L. E. Lazareva, and F. A. Nikolaev—18, 1159 (1964) [45, 1693 (1963)]

DAUTOV, R. A.
Spin Echo in a Local Field. (E) V. D. Korepanov, A. I. Chernitsyn, and R. A. Dautov—18, 266L (1964) [45, 385L (1963)]

DAVYDOV, A. S.
Excitons in Thin Crystals. (T) A. S. Davydov—18, 496 (1964) [45, 723 (1963)]

DAVYDOV, A. V.
Resonance Excitation of an Isomer State in Ag^{107} with a Mean Lifetime of 63 Seconds. (E) G. E. Bizina, A. G. Beda, N. A. Burgov, and A. V. Davydov—18, 973 (1964) [45, 1408 (1963)]

DAVYDOV, V. V.
Neutron Polarization in the Reactions T(p, n)He^3 and D(d, n)He^3. (E) N. V. Alekseev, U. R. Arifkhanov, N. A. Vlasov, V. V. Davydov and L. N. Samoĭlov—18, 979 (1964) [45, 1416 (1963)]

DELYAGIN, N. N.
The Mössbauer Effect on Sn^{119} Nuclei in a Vanadium Matrix. (E) V. A. Bryukhanov, N. N. Delyagin, and Yu. Kagan—18, 945 (1964) [45, 1372 (1963)]

DEMIDOV, V. S.
Effect of the Nucleus on π^0-Meson Production. (E) V. S. Demidov, E. D. Zhizhin, V. G. Kirillov-Ugryumov, A. K. Ponosov, F. M. Sergeev, and Ya. Ya. Shalamov—18, 301 (1964) [45, 437 (1963)]

DEMIKHOVSKIĬ, V. Ya.
Magnetization of Thin Ferromagnetic Films at Low Temperatures. (T) V. Ya. Demikhovskiĭ and B. A. Tavger—18, 797 (1964) [45, 1156 (1963)]

DEMIN, A. G.
Millisecond Thallium Isomers. (E) A. G. Demin, Yu. P. Kushakevich, E. A. Makoveev, I. M. Rozman, and A. F. Chachakov—18, 925 (1964) [45, 1344 (1963)]

New Short-lived Isomers of Ruthenium and Tellurium. (E) A. G. Demin and I. M. Rozman—18, 1417L (1964) [45, 2067L (1963)]

DEMKOV, Yu. N.
Charge Transfer at Small Resonance Defects. (T) Yu. N. Demkov—18, 138 (1964) [45, 195 (1963)]

DEVISHEV, M. I.
Efficiency of a Spark Chamber for Recording Charged Shower Particles. (E) V. N. Bolotov and M. I. Devishev—18, 1151L (1964) [45, 1680L (1963)]

DÉZSI, I.
Proton Capture Reaction on the Atomic Nuclei Na^{23}, Mg^{26}, Al^{27} and P^{31}. (E) I. Berkes, I. Dézsi, L. Keszthelyi, and I. Fodor—18, 1186 (1964) [45, 1731 (1963)]

DMITRIEV, N. A.
The Energy of Accidental Motions in the Expanding Universe. (T) N. A. Dmitriev and Ya. B. Zel'dovich—18, 793 (1964) [45, 1150 (1963)]

DOBRIKOV, V. N.
Measurement of Asymmetry in the N^{14}(d, p)N^{15} Reaction with Elastically Scattered Deuterons. (E) Yu. V. Gofman, V. N. Dobrikov N. I. Zaika, A. V. Mokhnach, and O. F. Nemets—18, 906 (1964) [45, 1317 (1963)]

DO IN SEB
Range Straggling of Charged Particles in Various Substances. (T) Do In Seb—18, 540 (1964) [45, 787 (1963)]

Investigation of the $\pi^+\pi^-$ Interaction at Low Energy by the Chew-Low Method. (T) Yu. A. Batusov, S. A. Bunyatov, Do In Seb, V. M. Sidorov, and V. A. Yarba—18, 629 (1964) [45, 913 (1963)]

DOLBILKIN, B. S.
Inelastic Scattering of γ Rays on Ag^{107}. (E) O. V. Bogdankevich, B. S. Dolbilkin, L. E. Lazareva, and F. A. Nikolaev—18, 606 (1964) [45, 882 (1963)]

Cross Section for Gamma-ray Absorption by Carbon in the Giant Resonance Region. (E) N. A. Burgov, G. V. Danilyan, B. S. Dolbilkin, L. E. Lazareva, and F. A. Nikolaev—18, 1159 (1964) [45, 1693 (1963)]

DOLGINOV, A. Z.
Theory of Multiple Scattering. (T) Yu. N. Gnedin and A. Z. Dolginov—18, 784 (1964) [45, 1136 (1963)]

DOLGOLENKO, A. G.
Evidence for the $\omega \to \pi^0 + \gamma$ Decay. (E) V. V. Barmin, A. G. Dolgolenko, Yu. S. Krestnikov, A. G. Meshkovskiĭ, Yu. P. Nikitin, and V. A. Shebanov—18, 1289 (1964) [45, 1879 (1963)]

Search for the Decay $\omega \to e^+ + e^-$. (E) V. V. Barmin, A. G. Dolgolenko, Yu. S. Krestnikov, A. G. Meshkovskiĭ, and V. A. Shebanov—18, 1427L (1964) [45, 2082L (1963)]

DOLGOLENKO, T. F.
Investigation of the De Haas-Van Alphen Effect in Bismuth at Ultra-low Temperatures. (E) N. B. Brandt, T. F. Dolgolenko, and N. N. Stupochenko—18, 908 (1964) [45, 1319 (1963)]

DOVZHENKO, O. I.
Radiation Units and Critical Energies for Various Substances. O. I. Dovzhenko and A. A. Pomanskiĭ—18, 187 (1964) [45, 268 (1963)]

DREMIN, I. M.
On Inelastic Processes Due to Various Types of Moving Poles. (T) I. M. Dremin and D. S. Chernavskiĭ—18, 1334 (1964) [45, 1943 (1963)]

DRUKAREV, G. F.
Adiabatic Approximation for Degenerate or Almost Degenerate States. (T) G. F. Drukarev—18, 1025 (1964) [45, 1484 (1963)]

D'YACHENKO, P. P.
Kinetic Energy of Fragments Produced in Symmetric Fission of U^{235}. (E) P. P. D'yachenko, B. D. Kuz'minov, L. S. Kutsaeva, V. N. Okolovich, G. N. Smirenkin, and A. N. Utyuzhnikov—18, 6 (1964) [45, 8 (1963)]

DZHELEPOV, B. S.
Alpha Decay of Curium Isotopes. (E) B. S. Dzhelepov, R. B. Ivanov, V. G. Nedovesov, and V. P. Chechev—18, 937 (1964) [45, 1360 (1963)]

ÉDEL'MAN, V. S.
Standing Magnetoplasma Waves in Bismuth, Connected with Hybrid Resonance. (E) V. S. Édel'man and M. S. Khaĭkin—18, 566L (1964) [45, 826L (1963)]

Properties of Magnetoplasma Waves in Bismuth Single Crystals. (T/E) M. S. Khaĭkin, L. A. Fal'kowskiĭ, V. S. Édel'man, and R. T. Mina—18, 1167 (1964) [45, 1704 (1963)]

EFIMOV, B. V.
Intensities of Gamma Transitions to the Ground Rotational Band in Neutron Resonances of the Gd^{155}(n, γ)Gd^{156} Reaction. (E) L. S. Danelyan, B. V. Efimov, S. K. Sotnikov, and V. Kakhramanov-Dzhazairov—18, 1274 (1964) [45, 1858 (1963)]

EFIMOV, V. N.
Investigation of Neutron Resonances in Rh^{103}. (E) Wang Naiyen, I. Vizi, V. N. Efimov, E. N. Karzhavina, Kim Hi San, A. B. Popov, L. B. Pikel'ner, M. I. Pshitula, T. Stadnikov,

Ch'eng Ling-Yen, É. I. Sharapov, I. I. Shelontsev, N. Yu. Shirikova, and Yu. S. Yazvitskiĭ—18, 1194 (1964) [45, 1743 (1963)]

EGOROV, V. S.
Galvanomagnetic Properties of Beryllium. (E) N. E. Alekseevskiĭ and V. S. Egorov—18, 268L (1964) [45, 388L (1963)]

Measurement of the Resistance of Single Crystals in a Pulsed Magnetic Field. (E) N. E. Alekseevskiĭ and V. S. Egorov—18, 309 (1964) [45, 448 (1963)]

ELEONSKIĬ, V. M.
The Effect of Collisions on the Excitation Spectrum of a System of Electrons. (T) Yu. Ya. Polyak and V. M. Eleonskiĭ—18, 114 (1964) [45, 159 (1963)]

ÉRAMZHYAN, R. A.
Angular Distribution of Recoil Nuclei in the Reaction $\mu^- + He^3 \rightarrow H^3 + \nu$. (T) G. Ya. Korenman and R. A. Éramzhyan—18, 767 (1964) [45, 1111 (1963)]

ERMACHENKO, V. M.
The Dielectric Constant of Crystals from the Quantum Viewpoint. (T) G. M. Gandel'man and V. M. Ermachenko—18, 358 (1964) [45, 522 (1963)]

ERMAKOV, A. I.
Experimental Observation of Landau Damping in a Plasma. (E) V. V. Dolgopolov, A. I. Ermakov, N. I. Nazarov, K. N. Stepanov, and V. T. Tolok—18, 866L (1964) [45, 1260L (1963)]

ESEL'SON, B. N.
The Equilibrium Diagram for the He^3-He^4 Liquid-crystal System. (E) N. G. Bereznyak, I. V. Bogoyavlenskiĭ, and B. N. Esel'son—18, 335 (1964) [45, 486 (1963)]

FABELINSKIĬ, I. L.
New Method for the Determination of Anisotropy Relaxation Time and Modulation of Light in a Kerr Cell. (T) I. L. Fabelinskiĭ—18, 564L (1964) [45, 822L (1963)]

FAKIDOV, I. G.
The Odd Component of the Galvanomagnetic Effect in the Ferrimagnetic Compound Mn_3Ge_2. (E) S. S. Levina, V. N. Novogrudskiĭ, and I. G. Fakidov—18, 38 (1964) [45, 52 (1963)]

FAL'KOWSKIĬ, L. A.
Properties of Magnetoplasma Waves in Bismuth Single Crystals. (T/E) M. S. Khaĭkin, L. A. Fal'kowskiĭ, V. S. Édel'man, and R. T. Mina—18, 1167 (1964) [45, 1704 (1963)]

FALOMKIN, I. V.
Measurement of the Total Muon Capture Probability in He^3. (E) O. A. Zaĭmidoroga, M. M. Kulyukin, B. Pontecorvo, R. M. Sulyaev, I. V. Falomkin, A. I. Filippov, V. M. Tsupko-Sitnikov, and Yu. A. Shcherbakov—18, 1235 (1964) [45, 1803 (1963)]

FEDCHENKO, E. D.
Compound-elastic Scattering in Elastic Scattering of 5.45 MeV Protons on Nickel Isotopes. (T) G. F. Timoshevskiĭ, R. A. Vanetsian, A. P. Klyucharev, and E. D. Fedchenko—18, 1340 (1964) [45, 1951 (1963)]

FEDORENKO, N. V.
Ionization of Gases by Fast Helium Atoms and Singly-charged Helium Ions. (E) E. S. Solov'ev, R. N. Il'in, V. A. Oparin, and N. V. Fedorenko—18, 342 (1964) [45, 496 (1963)]

FEDOTOV, P. I.
Decay of Residual Nuclei Produced in the Interaction of 660-MeV Protons with Carbon Nuclei. (E) A. P. Zhdanov and P. I. Fedotov—18, 313 (1964) [45, 455 (1963)]

FEĬNBERG, E. L.
Regge Shrinkage of the Diffraction Peak and the Role of Multimeson Interactions. (T) E. L. Feĭnberg and D. S. Chernavskiĭ—18, 861 (1964) [45, 1252 (1963)]

FETISOV, E. P.
Transition Radiation and Collective Oscillations in Metallic Films. (T) V. P. Silin and E. P. Fetisov—18, 1081 (1964) [45, 1572 (1963)]

FETISOV, V. N.
Theory of Photodisintegration of Light Nuclei With Emission of Fast Deuterons. (T) V. V. Balashov and V. N. Fetisov—18, 365 (1964) [45, 532 (1963)]

FILIMONOV, V. A.
Decays of the Hypernucleus Σ^+p. (T/E) V. A. Filimonov—18, 1342 (1964) [45, 1954 (1963)]

FILIPPOV, A. I.
Measurement of the Total Muon Capture Probability in He^3. (E) O. A. Zaĭmidoroga, M. M. Kulyukin, B. Pontecorvo, R. M. Sulyaev, I. V. Falomkin, A. I. Filippov, V. M. Tsupko-Sitnikov, and Yu. A. Shcherbakov—18, 1235 (1964) [45, 1803 (1963)]

FIRSOV, Yu. A.
Mobility of Small-radius Polarons at Low Temperatures. (T) I. G. Lang and Yu. A. Firsov—18, 262L (1964) [45, 378L (1963)]

FLEROV, G. N.
Formation of a Spontaneously Fissioning Isomer in Reactions Involving α Particles and Deuterons. (E) G. N. Flerov, S. M. Polikanov, K. A. Gavrilov, V. L. Mikheev, V. P. Perelygin, and A. A. Pleve—18, 964 (1964) [45, 1396 (1963)]

FODOR, I.
Proton Capture Reaction on the Atomic Nuclei Na^{23}, Mg^{26}, Al^{27} and P^{31}. (E) I. Berkes, I. Dézsi, L. Keszthelyi, and I. Fodor—18, 1186 (1964) [45, 1731 (1963)]

FOGEL', N. Ya.
Deviation from Kohler's Rule in Pure Aluminum. (E) E. S. Borovik, V. G. Volotskaya, and N. Ya. Fogel'—18, 34 (1964) [45, 46 (1963)]

FOMICHEV, V. A.
Ratio of Cross Sections for the Production of the Sc^{44} and Sc^{44m} Isomer Pair in Heavy Ion Reactions. (E) V. V. Bredel', B. A. Gvozdev, and V. A. Fomichev—18, 622 (1964) [45, 904 (1963)]

FOMIN, Yu. A.
The Energy Spectrum of Primary Cosmic Rays and Their Composition in the Ultrahigh-energy Range. (T) S. I. Syrovatskiĭ, Yu. A. Fomin, and G. B. Khristiansen—18, 1098 (1964) [45, 1595 (1963)]

FRADKIN, E. S.
The Doubly Logarithmic Approximation in Quantum Electrodynamics. (T) G. A. Milekhin and E. S. Fradkin—18, 1323 (1964) [45, 1926 (1963)]

FRANCZ, J.
Scattering of Protons With Energies Below 5 MeV on Ne^{20}. (E) H. Hulubei, J. Francz, N. Martalogu, N. Scintei, M. Ivascu, A. Berinde, and I. Neamu—18, 1248 (1964) [45, 1822 (1963)]

FROLOV, G. V.
Fermion Regge Poles and the Compton Effect. (T) V. G. Gorshkov, M. P. Rekalo, and G. V. Frolov—18, 199 (1964) [45, 285 (1963)]

Photoproduction of π Mesons on Nucleons and Fermion Regge Poles. (T) M. P. Rekalo, V. G. Gorshkov, and G. V. Frolov—18, 462 (1964) [45, 672 (1963)]

GAGARIN, Yu. F.
Fragment Production From the Interaction of 7.3-BeV π^- Mesons With Emulsion Nuclei. (E) Yu. F. Gagarin and N. S. Ivanova—18, 1228 (1964) [45, 1793 (1963)]

GAĬDUKOV, Yu. P.
Effect of Pressure on the Fermi Surfaces of Zinc and Cadmium. (E/T) Yu. P. Gaĭdukov and E. S. Itskevich—18, 51 (1964) [45, 71 (1963)]

GALEEV, A. A.
Nonlinear Theory of the Drift Instability of an Inhomogeneous Plasma in a Magnetic Field. (T) A. A. Galeev and L. I. Rudakov—18, 444 (1964) [45, 647 (1963)]

GANDEL'MAN, G. M.
The Dielectric Constant of Crystals from the Quantum Viewpoint. (T) G. M. Gandel'man and V. M. Ermachenko—18, 358 (1964) [45, 522 (1963)]

GANTMAKHER, V. F.
Dimension Effect in the Presence of Electron Drift Inside a Metal. (T/E) V. F. Gantmakher and É. A. Kaner—18, 988 (1964) [45, 1430 (1963)]

GANTSEVICH, S. V.
On the Theory of Gigantic Oscillations in Ultrasonic Absorption. (T) S. V. Gantsevich and V. L. Gurevich—18, 403 (1964) [45, 587 (1963)]

GARIBYAN, T. A.
Collective Effects in the Cs^{131} Nucleus. (E) G. A. Vartapetyan, A. G. Khudaverdyan, and T. A. Garibyan—18, 1178 (1964) [45, 1720 (1963)]

GAVRILOV, K. A.
Formation of a Spontaneously Fissioning Isomer in Reactions Involving α Particles and Deuterons. (E) G. N. Flerov, S. M. Polikanov, K. A. Gavrilov, V. L. Mikheev, V. P. Perelygin, and A. A. Pleve—18, 964 (1964) [45, 1396 (1963)]

GEDALIN, É. V.
Fluctuation of Number of Particles in Electron-photon Showers Produced by High-energy Muons. (T) É. V. Gedalin and N. M. Gerasimova—18, 389 (1964) [45, 565 (1963)]
Lateral Distribution of Nuclear-active Particles in Extensive Air Showers. (T) É. V. Gedalin—18, 1351 (1964) [45, 1967 (1963)]

GERASIMOVA, N. M.
Fluctuation of Number of Particles in Electron-photon Showers Produced by High-energy Muons. (T) É. V. Gedalin and N. M. Gerasimova—18, 389 (1964) [45, 565 (1963)]

GESHKENBEĬN, B. V.
Trajectories of Regge Vacuum Poles. (T) B. V. Geshkenbeĭn and B. L. Ioffe—18, 240 (1964) [45, 346 (1963)]
Restrictions on the Values of the Coupling Constants and the Vertex Part for the Interaction of Three Particles in Quantum Field Theory. II. (T) B. V. Geshkenbeĭn and B. L. Ioffe—18, 382 (1964) [45, 555 (1963)]

GIL'DENBURG, V. B.
Resonance Properties of Inhomogeneous Plasma Structures. (T) V. B. Gil'denburg—18, 1359 (1964) [45, 1978 (1963)]

GINZBURG, V. L.
Gamma Rays and Cyclotron Radiation X Rays of Galactic and Metagalactic Origin. (T) V. L. Ginzburg and S. I. Syrovatskiĭ—18, 245 (1964) [45, 353 (1963)]
Temperature Dependence of the Shape of the Domain Wall in Ferromagnetics and Ferroelectrics. (T) L. N. Bulaevskiĭ and V. L. Ginzburg—18, 530 (1964) [45, 772 (1963)]

GNEDIN, Yu. N.
Theory of Multiple Scattering. (T) Yu. N. Gnedin and A. Z. Dolginov—18, 784 (1964) [45, 1136 (1963)]

GOFMAN, Yu. V.
Measurement of Asymmetry in the $N^{14}(d, p)N^{15}$ Reaction with Elastically Scattered Deuterons. (E) Yu. V. Gofman, V. N. Dobrikov N. I. Zaika, A. V. Mokhnach, and O. F. Nemets—18, 906 (1964) [45, 1317 (1963)]

GOGITIDZE, O. N.
Observation of $K_2^0 \to \pi^+ + \pi^- + \pi^0$ Decays. (E) M. Kh. Anikina, O. N. Gogitidze, M. S. Zhuravleva, A. A. Kozlov, D. M. Kotlyarevskiĭ, Z. Sh. Mandzhavidze, A. N. Mestvirishvili, D. Neagu, E. O. Okonov, N. I. Petrov, A. M. Rozanova, V. A. Rusakov, G. G. Takhtamyshev, L. V. Chkhaidze, Wu Tsun-fan, and A. A. Tserelov—18, 323 (1964) [45, 469 (1963)]

GOKHBERG, B. M.
The Determination of Deuterium Plasma Density by Means of a Tritium Ion Beam. (E) B. M. Gokhberg, I. K. Kikoin, A. S. Knyazyatov, V. V. Mal'tsev, and G. A. Otroshchenko—18, 295 (1964) [45, 428 (1963)]

GOL'DMAN, I. I.
Regge Poles in the Scattering from a δ Potential. (T) V. M. Arutyunyan, I. I. Gol'dman, and G. A. Nagorskiĭ—18, 172 (1964) [45, 246 (1963)]
Polarization Phenomena in the Compton Scattering on a Moving Electron and the Possibility of Obtaining Beams of Polarized Photons. F. R. Arutyunyan, I. I. Gol'dman, and V. A. Tumanyan—18, 218 (1964) [45, 312 (1963)]

GOLDREICH, P.
On the Absorption of Gamma Rays in Intergalactic Space. (T) P. Goldreich and P. Morrison—18, 239 (1964) [45, 344 (1963)]

GOL'FAND, Yu. A.
The Space-time Structure of the Relativistic Scattering Matrix. (T) Yu. A. Gol'fand—18, 738 (1964) [45, 1067 (1963)]

GOLOVNYA, V. Ya.
Elastic Scattering of 3.4–4.2 MeV Protons by Ni^{62} and Ni^{64} Isotopes. (E) V. Ya. Golovnya, A. P. Klyucharev, and B. A. Shilyaev—18, 1183 (1964) [45, 1727 (1963)]

GONZATKO, Ya.
Inelastic Scattering of 14-MeV Neutrons on Mg^{24}. (E) B. A. Benetskiĭ, Yu. P. Betin, and Ya. Gonzatko—18, 640 (1964) [45, 927 (1963)]

GORICHEV, P. A.
Short Range Products From Nuclear Disintegrations Induced by Protons with Energies Between 2 and 9 GeV. (E) P. A. Gorichev, O. V. Lozhkin, and N. A. Perfilov—18, 1222 (1964) [45, 1784 (1963)]

GOR'KOV, L. P.
Microscopic Derivation of the Ginzburg-Landau Equations for an Anisotropic Superconductor. (T) L. P. Gor'kov and T. K. Melik-Barkhudarov—18, 1031 (1964) [45, 1493 (1963)]

GORSHKOV, V. G.
Fermion Regge Poles and the Compton Effect. (T) V. G. Gorshkov, M. P. Rekalo, and G. V. Frolov—18, 199 (1964) [45, 285 (1963)]
Photoproduction of π Mesons on Nucleons and Fermion Regge Poles. (T) M. P. Rekalo, V. G. Gorshkov, and G. V. Frolov—18, 462 (1964) [45, 672 (1963)]
Screening in Pair Conversion. (T) V. G. Gorshkov and K. Ridel'—18, 1103 (1964) [45, 1603 (1963)]

GRANOVSKIĬ, V. L.
Investigation of Transverse (Hall) Diffusion in a Plasma of Inert Gases. (E) É. I. Urazakov and V. L. Granovskiĭ—18, 883 (1964) [45, 1285 (1963)]

GREĬSER, A. I.
Electromagnetic Emission of Atomic Electrons During Beta Decay. (T) A. I. Greĭser—18, 782 (1964) [45, 1133 (1963)]

GRIBOV, V.
On Processes Determined by Fermion Regge Poles. (T) V. Gribov, L. Okun', and I. Pomeranchuk—18, 769 (1964) [45, 1114 (1963)]

GRIGOR'EV, V. N.

GRIGOROV, N. L.
Search for Antimatter in Cosmic Rays. (E) N. L. Grigorov, D. A. Zhuravlev, M. A. Kondrat'eva, I. D. Rapoport, and I. A. Savenko—18, 272L (1964) [45, 394L (1963)]
Surface Tension of Deuterohydrogen. (E) V. N. Grigor'ev—18, 72 (1964) [45, 98 (1963)]
Energy Spectrum of Nuclear-active Particles in Extensive Air Showers. (E) Kh. P. Babayan, N. G. Boyadzhyan, N. L. Grigorov, É. A. Mamidzhanyan, Ch. A. Tret'yakova, and V. Ya. Shestoperov—18, 288 (1964) [45, 418 (1963)]
Production of High Energy Pions by Cosmic Ray Particles. (T/E) N. L. Grigorov—18, 1063 (1964) [45, 1544 (1963)]
Composition of Nuclear-active Component of Cosmic Rays in the Atmosphere. (T) N. L. Grigorov—18, 1318 (1964) [45, 1919 (1963)]

GRISHIN, V. G.
Some Consequences of the Long Lifetime of η and ω Mesons. (T) V. G. Grishin and M. I. Podgoretskiĭ—18, 538 (1964) [45, 783 (1963)]

GUDZENKO, L. I.
Negative Absorption in a Nonequilibrium Hydrogen Plasma. (T) L. I. Gudzenko and L. A. Shelepin—18, 998 (1964) [45, 1445 (1963)]

GUREVICH, A. V.
Nonlinear Effects in Plasma Resonance. (T) A. V. Gurevich and L. P. Pitaevskiĭ—18, 855 (1964) [45, 1243 (1963)]

GUREVICH, L. É.
Temperature Dependence of the Line Width of Resonance Absorption by the Lattice of Ionic Crystals. (T) L. É. Gurevich and I. P. Ipatova—18, 162 (1964) [45, 231 (1963)]
Thermal EMF Due to Electron-magnon Scattering in Ferromagnetic Metals. (T) L. É. Gurevich and G. M. Nedlin—18, 396 (1964) [45, 576 (1963)]

GUREVICH, V. L.
On the Theory of Gigantic Oscillations in Ultrasonic Absorption. (T) S. V. Gantsevich and V. L. Gurevich—18, 403 (1964) [45, 587 (1963)]

GURZHI, R. N.
Effect of Anharmonicities of High Order on Transport Processes in Solids. (T) R. N. Gurzhi—18, 515 (1964) [45, 750 (1963)]

GVOZDEV, B. A.
Ratio of Cross Sections for the Production of the Sc^{44} and Sc^{44m} Isomer Pair in Heavy Ion Reactions. (E) V. V. Bredel', B. A. Gvozdev, and V. A. Fomichev—18, 622 (1964) [45, 904 (1963)]

HOFMOKL, T.
Λ Hyperon Production by 7—8 GeV Negative Pions in Hydrogen. (E) V. A. Belyakov, V. I. Veksler, N. M. Viryasov, I. Vrana, Kim Hi In, E. N. Kladnitskaya, A. A. Kuznetsov, A. Mikhul, Nguyen Dinh Tu, M. I. Solov'ev, T. Hofmokl, and Ch'eng Ling-Yen—18, 64 (1964) [45, 88 (1963)]

HOHENBERG, P.
Anisotropic Superconductors with Nonmagnetic Impurities. (T) P. Hohenberg—18, 834 (1964) [45, 1208 (1963)]

HULUBEI, H.
Scattering of Protons With Energies Below 5 MeV on Ne^{20}. (E) H. Hulubei, J. Francz, N. Martalogu, N. Scintei, M. Ivascu, A. Berinde, and I. Neamu—18, 1248 (1964) [45, 1822 (1963)]

IGNAT'EV, K. G.
Gamma Ray Spectra Following Resonance Capture of Neutrons. (E) V. Ratynskiĭ, K. G. Ignat'ev, I. V. Kirpichnikov, F. N. Belyaev, and S. I. Sukhoruchkin—18, 598 (1964) [45, 870 (1963)]
Spin Dependence of Density of Resonance Levels. (E) K. G. Ignat'ev, I. V. Kirpichnikov, and S. I. Sukhoruchkin—18, 602 (1964) [45, 875 (1963)]

ILIESCU, N.
Neutron Resonances in Bromine. (E) D. Zeliger, N. Iliescu, Kim Hi San, D. Longo, L. B. Pikel'ner, and É. I. Sharapov—18, 889 (1964) [45, 1294 (1963)]

ILIESKU, É.
Measurement of the Spin Correlation Coefficient in Elastic 315-MeV Proton-proton Scattering. (E) I. M. Vasilevskiĭ, V. V. Vishnyakov, É. Iliesku, and A. A. Tyapkin—18, 327 (1964) [45, 474 (1963)]

IL'IN, R. N.
Ionization of Gases by Fast Helium Atoms and Singly-charged Helium Ions. (E) E. S. Solov'ev, R. N. Il'in, V. A. Oparin, and N. V. Fedorenko—18, 342 (1964) [45, 496 (1963)]

IL'INA, M. A.
Effect of Pressure on the Superconducting Transition Temperature of the Alloys Nb_3Sn and Nb—Zr. (E) E. S. Itskevich, M. A. Il'ina, and V. A. Sukhoparov—18, 949 (1964) [45, 1378 (1963)]

INOPIN, E.
Scattering of Electrons by Nuclei According to the α Particle Model of the Nucleus. (T) V. Vadia, E. Inopin, and M. Yusef—18, 802 (1964) [45, 1164 (1963)]

IOFFE, B. L.
Trajectories of Regge Vacuum Poles. (T) B. V. Geshkenbeĭn and B. L. Ioffe—18, 240 (1964) [45, 346 (1963)]
Restrictions on the Values of the Coupling Constants and the Vertex Part for the Interaction of Three Particles in Quantum Field Theory. II. (T) B. V. Geshkenbeĭn and B. L. Ioffe—18, 382 (1964) [45, 555 (1963)]

IOGANSEN, L. V.
The Possibility of Resonance Transmission of Electrons in Crystals Through a System of Barriers. (T) L. V. Iogansen—18, 146 (1964) [45, 207 (1963)]

IOSILVESKIĬ, Ya.
Anomalous Behavior of Specific Heat of Crystals with Heavy Impurity Atoms. (T) Yu. Kagan and Ya. Iosilevskiĭ—18, 562L (1964) [45, 819L (1963)]

IPATOVA, I. P.
Temperature Dependence of the Line Width of Resonance Absorption by the Lattice of Ionic Crystals. (T) L. É. Gurevich and I. P. Ipatova—18, 162 (1964) [45, 231 (1963)]

ISAEV, P. S.
πN Scattering Partial Waves with Account of $\pi\pi$ Interaction. (T) P. S. Isaev, V. I. Lend'el, and V. A. Meshcheryakov—18, 205 (1964) [45, 294 (1963)]

ISHKHANOV, B. S.
Cross Section of the Rh^{103} (γ, p) Reaction. (E) B. S. Ishkhanov, É. N. Kornienko, Yu. I. Sorokin, V. G. Shevchenko, and B. A. Yur'ev—18, 29 (1964) [45, 38 (1963)]

ISPIRYAN, K. A.
The Scattering of Light by Light. (T) V. M. Arutyunyan, F. R. Arutyunyan, K. A. Ispiryan, and V. A. Tumanyan—18, 873L (1964) [45, 1270L (1963)]

ITSKEVICH, E. S.
Effect of Pressure on the Fermi Surfaces of Zinc and Cadmium. (E/T) Yu. P. Gaĭdukov and E. S. Itskevich—18, 51 (1964) [45, 71 (1963)]

Effect of Pressure on the Superconducting Transition Temperature of the Alloys Nb_3Sn and Nb—Zr. (E) E. S. Itskevich, M. A. Il'ina, and V. A. Sukhoparov—18, 949 (1964) [45, 1378 (1963)]

IVANOV, E. N.
Theory of Rotational Brownian Motion. (T) E. N. Ivanov—18, 1041 (1964) [45, 1509 (1963)]

IVANOV, G. K.
Scattering Theory in the Impulse Approximation. (T) G. K. Ivanov and Yu. S. Sayasov—18, 1006 (1964) [45, 1456 (1963)]

IVANOV, R. B.
Alpha Decay of Curium Isotopes. (E) B. S. Dzhelepov, R. B. Ivanov, V. G. Nedovesov, and V. P. Chechev—18, 937 (1964) [45, 1360 (1963)]

IVANOVA, N. S.
Fragment Production From the Interaction of 7.3-BeV π^- Mesons With Emulsion Nuclei. (E) Yu. F. Gagarin and N. S. Ivanova—18, 1228 (1964) [45, 1793 (1963)]

IVASCU, M.
Scattering of Protons With Energies Below 5 MeV on Ne^{22}. (E) H. Hulubei, J. Francz, N. Martalogu, N. Scintei, M. Ivascu, A. Berinde, and I. Neamu—18, 1248 (1964) [45, 1822 (1963)]

KABALKINA, S. S.
Phase Transitions in Tellurium at High Pressures. (E) S. S. Kabalkina, L. F. Vereshchagin, and B. M. Shulenin—18, 1422L (1964) [45, 2073L (1963)]

KACHINSKIĬ, V. N.
The Fermi Surface of Tungsten (E) N. V. Volkenshteĭn, V. N. Kachinskiĭ, and L. S. Starostina—18, 32 (1964) [45, 43 (1963)]

KADOMTSEV, B. B.
Turbulent Diffusion of a Rarefied Plasma in a Strong Magnetic Field. (T) B. B. Kadomtsev—18, 847 (1964) [45, 1230 (1963)]

KAGAN, Yu.
Anomalous Behavior of Specific Heat of Crystals with Heavy Impurity Atoms. (T) Yu. Kagan and Ya. Iosilevskiĭ—18, 562L (1964) [45, 819L (1963)]

The Mössbauer Effect on Sn^{119} Nuclei in a Vanadium Matrix. (E) V. A. Bryukhanov, N. N. Delyagin, and Yu. Kagan—18, 945 (1964) [45, 1372 (1963)]

Theory of Hyperfine Structure of the Mössbauer Line in Paramagnetic Substances. (T) A. M. Afanas'ev and Yu. Kagan—18, 1139 (1964) [45, 1660 (1963)]

KAGANOV, M. I.
A Nonthreshold Photoconductive Effect in Metals with Intersecting Bands. (T) M. I. Kaganov and I. M. Lifshitz—18, 655 (1964) [45, 948 (1963)]

Galvanomagnetic Phenomena in an Alternating Electromagnetic Field. (T) F. G. Bass, A. Ya. Blank, and M. I. Kaganov—18, 747 (1964) [45, 1081 (1963)]

On Threshold Absorption of Sound in a Uniaxial Antiferromagnet. (T) M. I. Kaganov and I. E. Chupis—18, 1088 (1964) [45, 1581 (1963)]

KAIPOV, D. K.
Resonance Scattering by Sn^{116} and Cu^{65} Nuclei of Gamma Rays from Solid and Liquid Sources. (E) D. K. Kaipov, Yu. K. Shubnyĭ, Yu. G. Kosyak, and R. B. Begzhanov—18, 305 (1964) [45, 443 (1963)]

KAKHRAMANOV-DZHAZAIROV, V.
Intensities of Gamma Transitions to the Ground Rotational Band in Neutron Resonances of the $Gd^{155}(n, \gamma)Gd^{156}$ Reaction. (E) L. S. Danelyan, B. V. Efimov, S. K. Sotnikov, and V. Kakhramanov-Dzhazairov—18, 1274 (1964) [45, 1858 (1963)]

KALACHEV, B. V.
Investigation of a Pulsed Discharge in a High-velocity Air Stream. (E) B. V. Kalachev—18, 59 (1964) [45, 83 (1963)]

KALASHNIKOV, N. P.
Ionization Losses in an Inhomogeneous Medium. (T) N. P. Kalashnikov and M. I. Ryazanov—18, 227 (1964) [45, 325 (1963)]

KAMINKER, D. M.
Measurement of the Lifetime of the Levels in the Eu^{152}, Ag^{110}, and Cs^{134} Nuclei Produced in $(n\gamma)$-Reactions. (E) A. M. Berestovoĭ, D. M. Kaminker, and I. A. Kondurov—18, 613 (1964) [45, 892 (1963)]

KANAVETS, V. P.
Comparison of Elastic πp and pp Scattering on the Basis of a Model with Three Regge Poles. (T) V. P. Kanavets, I. I. Levintov, and B. V. Morozov—18, 467 (1964) [45, 679 (1963)]

Polarization in pp Scattering at 8.5 BeV. (E) V. P. Kanavets, I. I. Levintov, B. V. Morozov, and M. D. Shafranov—18, 874L (1964) [45, 1272L (1963)]

KANER, E. A.
Theory of Resonance Excitation of Weakly Decaying Electromagnetic Waves in Metals. (T) É. A. Kaner and V. G. Skobov—18, 419 (1964) [45, 610 (1963)]

Dimension Effect in the Presence of Electron Drift Inside a Metal. (T/E) V. F. Gantmakher and É. A. Kaner—18, 988 (1964) [45, 1430 (1963)]

KARCHEVSKIĬ, A. I.
Investigation of the Magnetostriction of the Metamagnetic Alloy $MnAu_2$. (E) V. I. Nikolaev, A. I. Karchevskiĭ, V. G. Tsinoev, and B. V. Vasil'ev—18, 331 (1964) [45, 480 (1963)]

KARNAUKHOV, V. A.
Observation of Radioactive Decay with Emission of Protons. (E) V. A. Karnaukhov, G. M. Ter-Akop'yan, L. A. Petrov, and V. G. Subbotin—18, 879L (1964) [45, 1280L (1963)]

KARZHAVINA, E. N.
Investigation of Neutron Resonances in Rh^{103}. (E) Wang Nai-yen, I. Vizi, V. N. Efimov, E. N. Karzhavina, Kim Hi San, A. B. Popov, L. B. Pikel'ner, M. I. Pshitula, T. Stadnikov, Ch'eng Ling-Yen, É. I. Sharapov, I. I. Shelontsev, N. Yu. Shirikova, and Yu. S. Yazvitskiĭ—18, 1194 (1964) [45, 1743 (1963)]

KAZARINOV, Yu. M.
Phase Shift Analysis of Nucleon-nucleon Scattering at 147 MeV. (T) Yu. M. Kazarinov, V. S. Kiselev, and I. N. Silin—18, 437 (1964) [45, 637 (1963)]

KELDYSH, L. V.
Deep Levels in Semiconductors. (T) L. V. Keldysh—18, 253 (1964) [45, 364 (1963)]

KESZTHELYI, L.
Proton Capture Reaction on the Atomic Nuclei Na^{23}, Mg^{26}, Al^{27} and P^{31}. (E) I. Berkes, I. Dézsi, L. Keszthelyi, and I. Fodor—18, 1186 (1964) [45, 1731 (1963)]

KHACHATURYAN, M. N.
Measurement of the Cross Section of the Reaction $C^{12}(p, pn)C^{11}$ at 9 BeV. (E) B. I. Bekker, V. S. Pantuev, V. A. Sviridov, and M. N. Khachaturyan—18, 872L (1964) [45, 1269L (1963)]

Total Cross Section for the Interaction Between Neutrons and Protons at 5.5 GeV. (E) M. N. Khachaturyan and V. S. Pantuev—18, 1239 (1964) [45, 1808 (1963)]

KHAĬKIN, M. S.
Standing Magnetoplasma Waves in Bismuth, Connected with Hybrid Resonance. (E) V. S. Édel'man and M. S. Khaĭkin—18, 566L (1964) [45, 826L (1963)]

Investigation of the Fermi Surface in Lead by the Cyclotron Resonance Method. (E) R. T. Mina and M. S. Khaĭkin—18, 896 (1964) [45, 1304 (1963)]

Properties of Magnetoplasma Waves in Bismuth Single Crystals. (T/E) M. S. Khaĭkin, L. A. Fal'kovskiĭ, V. S. Édel'man, and R. T. Mina—18, 1167 (1964) [45, 1704 (1963)]

KHALATNIKOV, I. M.
An Investigation of the S Matrix in the Complex Angular Momentum Plane in the Quasiclassical Case. (T) A. Z. Patashinskiĭ, V. L. Pokrovskiĭ, and I. M. Khalatnikov—18, 522 (1964) [45, 760 (1963)]

Quasiclassical Scattering in a Centrally Symmetric Field. (T) A. Z. Patashinskiĭ, V. L. Pokrovskiĭ, and I. M. Khalatnikov—18, 683 (1964) [45, 989 (1963)]

KHALFIN, L. A.
The Hypothesis of Regge Poles in Quantum Field Theory and the Threshold Singularities of Inelastic Processes. (T) L. A. Khalfin—18, 433 (1964) [45, 631 (1963)]

KHAZANOVICH, T. N.
Relaxation and Shape of Paramagnetic Resonance Lines in Highly Viscous Media. (T) N. N. Korst and T. N. Khazanovich—18, 1049 (1964) [45, 1523 (1963)]

KHEĬFETS, S. A.
On the Radiative Attenuation Theory of Radial Oscillations of an Electron in a Magnetic Field. (T) S. A. Kheĭfets and Yu. F. Orlov—18, 844 (1964) [45, 1225 (1963)]

KHODOVOĬ, V. A.
Modulation of Scattered Light by Parametric Resonance. (T/E) E. B. Aleksandrov, O. V. Konstantinov, V. I. Perel', and V. A. Khodovoĭ—18, 346 (1964) [45, 503 (1963)]

KHOKHLOV, R. V.
Coherent Interaction Length of Light Waves in a Nonlinear Medium. (E) S. A. Akhmanov, A. I. Kovrigin, R. V. Khokhlov, and O. N. Chunaev—18, 919 (1964) [45, 1336 (1963)]

KHORENKO, V. K.
Layered and Filamentlike Structure of Superconducting Nb-Zr and Nb-Ti Alloys. (E) B. G. Lazarev, V. K. Khorenko, L. A. Kornienko, A. I. Krivko, A. A. Matsakova, and O. N. Ovcharenko—18, 1417L (1964) [45, 2068L (1963)]

KHORUZHIĬ, S. S.
Analytical Properties of the Amplitude in the Quasipotential Scattering Problem. (T) O. I. Zav'yalov, M. K. Polivanov, and S. S. Khoruzhiĭ—18, 1135 (1964) [45, 1654 (1963)]

KHRISTIANSEN, G. B.
The Energy Spectrum of Primary Cosmic Rays and Their Composition in the Ultrahigh-energy Range. (T) S. I. Syrovat-skiĭ, Yu. A. Fomin, and G. B. Khristiansen—18, 1098 (1964) [45, 1595 (1963)]

KHUDAVERDYAN, A. G.
Collective Effects in the Cs^{131} Nucleus. (E) G. A. Vartapetyan, A. G. Khudaverdyan, and T. A. Garibyan—18, 1178 (1964) [45, 1720 (1963)]

KIKOIN, I. K.
The Determination of Deuterium Plasma Density by Means of a Tritium Ion Beam. (E) B. M. Gokhberg, I. K. Kikoin, A. S. Knyazyatov, V. V. Mal'tsev, and G. Á. Otroshchenko—18, 295 (1964) [45, 428 (1963)]

Effect of a Magnetic Field on the Recombination Radiation from Ge and its Quenching by Infrared Radiation. (E) I. K. Kikoin and Yu. P. Kozyrev—18, 962 (1964) [45, 1393 (1963)]

KIM Hi In
$\bar{\Lambda}$ Hyperon Production by 7–8 GeV Negative Pions in Hydrogen. (E) V. A. Belyakov, V. I. Veksler, N. M. Viryasov, I. Vrana, Kim Hi In, E. N. Kladnitskaya, A. A. Kuznetsov, A. Mikhul, Nguyen Dinh Tu, M. I. Solov'ev, T. Hofmokl, and Ch'eng Ling-Yen—18, 64 (1964) [45, 88 (1963)]

Polarization of Λ Hyperons Produced in π^--C Interactions at 7 GeV. (E) V. A. Belyakov, Wang Yung-Chang, V. I. Veksler, N. M. Viryasov, Tu Yuan-T'sai, Kim Hi In, E. M. Kladnitskaya, A. A. Kuznetsov, Nguyen Din Tu, V. I. Penev, and M. I. Solov'ev—18, 66 (1964) [45, 90 (1963)]

KIM Hi San
Neutron Resonances in Bromine. (E) D. Zeliger, N. Iliescu, Kim Hi San, D. Longo, L. B. Pikel'ner, and É. I. Sharapov—18, 889 (1964) [45, 1294 (1963)]

Investigation of Neutron Resonances in Rh^{103}. (E) Wang Nai-yen, I. Vizi, V. N. Efimov, E. N. Karzhavina, Kim Hi San, A. B. Popov, L. B. Pikel'ner, M. I. Pshitula, T. Stadnikov, Ch'eng Ling-Yen, É. I. Sharapov, I. I. Shelontsev, N. Yu. Shirikova, and Yu. S. Yazvitskiĭ—18, 1194 (1964) [45, 1743 (1963)]

KIRILLOV-UGRYUMOV, V. G.
Effect of the Nucleus on π^0-Meson Production. (E) V. S. Demidov, E. D. Zhizhin, V. G. Kirillov-Ugryumov, A. K. Ponosov, F. M. Sergeev, and Ya. Ya. Shalamov—18, 301 (1964) [45, 437 (1963)]

KIRILLOVA, L. F.
Small-angle Proton-proton Elastic Scattering at 6 and 10 GeV. (E) L. F. Kirillova, V. A. Nikitin, A. A. Nomofilov, V. A. Sviridov, L. N. Strunov, and M. G. Shafranova—18, 867L (1964) [45, 1261L (1963)]

KIRPICHNIKOV, I. V.
Gamma Ray Spectra Following Resonance Capture of Neutrons. (E) V. Ratynskiĭ, K. G. Ignat'ev, I. V. Kirpichnikov, F. N. Belyaev, and S. I. Sukhoruchkin—18, 598 (1964) [45, 870 (1963)]

Spin Dependence of Density of Resonance Levels. (E) K. G. Ignat'ev, I. V. Kirpichnikov, and S. I. Sukhoruchkin—18, 602 (1964) [45, 875 (1963)]

KIRZHNITS, D. A.
Field Theory with Nonlocal Interaction. II. The Dynamical Apparatus of the Theory. (T) D. A. Kirzhnits—18, 103 (1964) [45, 144 (1963)]

Field Theory With Nonlocal Interaction. III. Diagram Technique. (T) D. A. Kirzhnits—18, 1390 (1964) [45, 2024 (1963)]

KISELEV, V. S.
Phase Shift Analysis of Nucleon-nucleon Scattering at 147 MeV. (T) Yu. M. Kazarinov, V. S. Kiselev, and I. N. Silin—18, 437 (1964) [45, 637 (1963)]

KLADNITSKAYA, E. N.
$\bar{\Lambda}$ Hyperon Production by 7–8 GeV Negative Pions in Hydrogen. (E) V. A. Belyakov, V. I. Veksler, N. M. Viryasov, I. Vrana, Kim Hi In, E. N. Kladnitskaya, A. A. Kuznetsov, A. Mikhul, Nguyen Dinh Tu, M. I. Solov'ev, T. Hofmokl, and Ch'eng Ling-Yen—18, 64 (1964) [45, 88 (1963)]

Polarization of Λ Hyperons Produced in π^--C Interactions at 7 GeV. (E) V. A. Belyakov, Wang Yung-Chang, V. I. Veksler, N. M. Viryasov, Tu Yuan-T'sai, Kim Hi In, E. M. Kladnitskaya, A. A. Kuznetsov, Nguyen Din Tu, V. I. Penev, and M. I. Solov'ev—18, 66 (1964) [45, 90 (1963)]

KLEPIKOV, N. P.
Phase Shifts of Coulomb pp Scattering. (T) N. P. Klepikov—18, 261 (1964) [45, 376 (1963)]

Phenomenological Analysis of pp Interaction at 657 MeV. I. (T/E) L. S. Azhgirei, N. P. Klepikov, Yu. P. Kumekin, M. G. Meshcheryakov, S. B. Nurushev, and G. D. Stoletov—18, 810 (1964) [45, 1174 (1963)]

KLYSHKO, D. N.
Frequency Conversion in Quantum Systems with Discrete Energy Levels. (T/E) A. V. Voskanyan, D. N. Klyshko, and V. S. Tumanov—18, 967 (1964) [45, 1399 (1963)]

KLYUCHAREV, A. P.
On the Mechanism of Total Nuclear Disintegration. (T) Yu. A. Berezhnoĭ, A. P. Klyucharev, Yu. N. Ranyuk, and N. Ya. Rutkevich—18, 713 (1964) [45, 1030 (1963)]

Emission of Three α Particles in Interactions Between B^{10} Ions and Light Nuclei. (E) S. N. Shumilov, A. P. Klyucharev, and N. Ya. Rutkevich—18, 934 (1964) [45, 1356 (1963)]

Elastic Scattering of 3.4—4.2 MeV Protons by Ni^{62} and Ni^{64} Isotopes. (E) V. Ya. Golovnya, A. P. Klyucharev, and B. A. Shilyaev—18, 1183 (1964) [45, 1727 (1963)]

Compound-elastic Scattering in Elastic Scattering of 5.45 MeV Protons on Nickel Isotopes. (T) G. F. Timoshevskiĭ, R. A. Vanetsian, A. P. Klyucharev, and E. D. Fedchenko—18, 1340 (1964) [45, 1951 (1963)]

KNYAZEV, I. N.
Study of Pulsed Laser Generation in Neon and in Mixtures of Neon and Helium. (E) G. G. Petrash and I. N. Knyazev—18, 571 (1964) [45, 833 (1963)]

KNYAZYATOV, A. S.
The Determination of Deuterium Plasma Density by Means of a Tritium Ion Beam. (E) B. M. Gokhberg, I. K. Kikoin, A. S. Knyazyatov, V. V. Mal'tsev, and G. A. Otroshchenko—18, 295 (1964) [45, 428 (1963)]

KOCHETKOV, V. L.
Lifetime of the 4⁺ (2310 keV) Level in Tl^{48}. (E) A. F. Akkerman, V. L. Kochetkov, V. N. Chekanov, V. V. Suvorov, and A. K. Shtol'ts—18, 1218 (1964) [45, 1778 (1963)]

KOGAN, A. V.
Measurement of the Nuclear Specific Heats of Iridium and Rhenium in Iron Alloys. (E) A. V. Kogan, V. D. Kul'kov, L. P. Nikitin, N. M. Reĭnov, and M. F. Stel'makh—18, 1 (1964) [45, 1 (1963)]

KOLKUNOV, V. A.
Nonrelativistic Regge Trajectories. I. (T) V. A. Kolkunov—18, 775 (1964) [45, 1123 (1963)]

K_{e_3} Decay. (T) V. A. Kolkunov and I. V. Lyagin—18, 1379 (1964) [45, 2009 (1963)]

KOMAR, A. P.
Comparison of the Absolute Measurements of the Energy in a Bremsstrahlung Beam Performed in the Laboratories of Different Countries. (E) A. P. Komar, S. P. Kruglov, and I. V. Lopatin—18, 565L (1964) [45, 824L (1963)]

KOMAROV, V. V.
Investigation of Nucleon Induced Deuteron Disintegration by the Diagram Summation Technique. (T) V. V. Komarov and A. M. Popova—18, 151 (1964) [45, 214 (1963)]

KONDORSKIĬ, E. I.
Degree of Localization of Magnetic Electrons and the Nernst-Ettingshausen Effect in Ferromagnetic Metals. (E) E. I. Kondorskiĭ and R. P. Vasil'eva—18, 277 (1964) [45, 401 (1963)]

On the Theory of the Nernst-Ettingshausen Effect in Ferromagnetic Metals. (T) E. I. Kondorskiĭ—18, 351 (1964) [45, 511 (1963)]

Dependence of the Electric and Magnetic Properties of Chromium on the Magnetic Field Strength and Temperature. (E) T. I. Kostina, T. N. Kozlova, and E. I. Kondorskiĭ—18, 931 (1964) [45, 1352 (1963)]

KONDRAT'EVA, M. A.
Search for Antimatter in Cosmic Rays. (E) N. L. Grigorov, D. A. Zhuravlev, M. A. Kondrat'eva, I. D. Rapoport, and I. A. Savenko—18, 272L (1964) [45, 394L (1963)]

KONDUROV, I. A.
Measurement of the Lifetime of the Levels in the Eu^{152}, Ag^{110}, and Cs^{134} Nuclei Produced in (nγ)-Reactions. (E) A. M. Berestovoĭ, D. M. Kaminker, and I. A. Kondurov—18, 613 (1964) [45, 892 (1963)]

KONSTANTINOV, I. O.
Angular Distribution of the Polarization of Neutrons from the $C^{12}(d, n)N^{13}$ Reaction. (E) N. P. Babenko, I. O. Konstantinov, and Yu. A. Nemilov—18, 959 (1964) [45, 1389 (1963)]

KONSTANTINOV, O. V.
Coherence of States in the Scattering of Modulated Light. (T) O. V. Konstantinov and V. I. Perel'—18, 195 (1964) [45, 279 (1963)]

Modulation of Scattered Light by Parametric Resonance. (T/E) E. B. Aleksandrov, O. V. Konstantinov, V. I. Perel', and V. A. Khodovoĭ—18, 346 (1964) [45, 503 (1963)]

KONTOROVICH, V. M.
Elasticity Theory Equations and Dispersion of Sound in Metals. (T) V. M. Kontorovich—18, 1125 (1964) [45, 1638 (1963)]

KONYUKHOV, V. K.
Ruby Laser with Generation Duration of ~10 Milliseconds. (E) V. K. Konyukhov, L. A. Kulevskiĭ, and A. M. Prokhorov—18, 588 (1964) [45, 857 (1963)]

KOPVILLEM, U. Kh.
The Opto-acoustic Maser Effect. (T) V. R. Nagibarov and U. Kh. Kopvillem—18, 1377 (1964) [45, 2006 (1963)]

KORENMAN, G. Ya.
Angular Distribution of Recoil Nuclei in the Reaction $\mu^- + He^3 \rightarrow H^3 + \nu$. (T) G. Ya. Korenman and R. A. Éramzhyan—18, 767 (1964) [45, 1111 (1963)]

KOREPANOV, V. D.
Spin Echo in a Local Field. (E) V. D. Korepanov, A. I. Chernitsyn, and R. A. Dautov—18, 266L (1964) [45, 385L (1963)]

KORNIENKO, É. N.
Cross Section of the $Rh^{103}(\gamma, p)$ Reaction. (E) B. S. Ishkhanov, É. N. Kornienko, Yu. I. Sorokin, V. G. Shevchenko, and B. A. Yur'ev—18, 29 (1964) [45, 38 (1963)]

KORNIENKO, L. A.
Layered and Filamentlike Structure of Superconducting Nb-Zr and Nb-Ti Alloys. (E) B. G. Lazarev, V. K. Khorenko, L. A. Kornienko, A. I. Krivko, A. A. Matsakova, and O. N. Ovcharenko—18, 1417L (1964) [45, 2068L (1963)]

KOROBKIN, V. V.
On the Theory of the Pulsations in the Output of the Ruby Laser. (T) V. V. Korobkin and A. V. Uspenskiĭ—18, 693 (1964) [45, 1003 (1963)]

KORST, N. N.
Relaxation and Shape of Paramagnetic Resonance Lines in Highly Viscous Media. (T) N. N. Korst and T. N. Khazanovich—18, 1049 (1964) [45, 1523 (1963)]

KOSTINA, T. I.
Dependence of the Electric and Magnetic Properties of Chromium on the Magnetic Field Strength and Temperature. (E) T. I. Kostina, T. N. Kozlova, and E. I. Kondorskiĭ—18, 931 (1964) [45, 1352 (1963)]

KOSYAK, Yu. G.
Resonance Scattering by Sn^{118} and Cu^{65} Nuclei of Gamma Rays from Solid and Liquid Sources. (E) D. K. Kaipov, Yu. K. Shubnyĭ, Yu. G. Kosyak, and R. B. Begzhanov—18, 305 (1964) [45, 443 (1963)]

KOTENKO, L. P.
Inelastic Scattering of 2.66-GeV π^- Mesons on Nucleons and Carbon Nuclei. (E) G. I. Merzon and L. P. Kotenko—18, 14 (1964) [45, 18 (1963)]

KOTLYAREVSKIĬ, D. M.
Observation of $K_2^0 \rightarrow \pi^+ + \pi^- + \pi^0$ Decays. (E) M. Kh. Anikina, O. N. Gogitidze, M. S. Zhuravleva, A. A. Kozlov, D. M. Kotlyarevskiĭ, Z. Sh. Mandzhavidze, A. N. Mestvirishvili, D. Neagu, E. O. Okonov, N. I. Petrov, A. M. Rozanova, V. A. Rusakov, G. G. Takhtamyshev, L. V. Chkhaidze, Wu Tsun-fan, and A. A. Tserelov—18, 323 (1964) [45, 469 (1963)]

KOVRIGIN, A. I.
Coherent Interaction Length of Light Waves in a Nonlinear Medium. (E) S. A. Akhmanov, A. I. Kovrigin, R. V. Khokhlov, and O. N. Chunaev—18, 919 (1964) [45, 1336 (1963)]

KOZLOV, A. A.
Observation of $K_2^0 \rightarrow \pi^+ + \pi^- + \pi^0$ Decays. (E) M. Kh. Anikina, O. N. Gogitidze, M. S. Zhuravleva, A. A. Kozlov, D. M. Kotlyarevskiĭ, Z. Sh. Mandzhavidze, A. N. Mestvirishvili, D. Neagu, E. O. Okonov, N. I. Petrov, A. M. Rozanova, V. A. Rusakov, G. G. Takhtamyshev, L. V. Chkhaidze, Wu Tsun-fan, and A. A. Tserelov—18, 323 (1964) [45, 469 (1963)]

KOZLOVA, T. N.
Dependence of the Electric and Magnetic Properties of Chromium on the Magnetic Field Strength and Temperature. (E) T. I. Kostina, T. N. Kozlova, and E. I. Kondorskiĭ—18, 931 (1964) [45, 1352 (1963)]

KOZYREV, Yu. P.
Effect of a Magnetic Field on the Recombination Radiation from Ge and its Quenching by Infrared Radiation. (E) I. K. Kikoin and Yu. P. Kozyrev—18, 962 (1964) [45, 1393 (1963)]

KREĬNES, N. M.
Antiferromagnetic Resonance in $MnCO_3$. (E) A. S. Borovik-Romanov, N. M. Kreĭnes, and L. A. Prozorova—18, 46 (1964) [45, 64 (1963)]

KRESTNIKOV, Yu. S.
Evidence for the $\omega \rightarrow \pi^0 + \gamma$ Decay. (E) V. V. Barmin, A. G. Dolgolenko, Yu. S. Krestnikov, A. G. Meshkovskiĭ, Yu. P. Nikitin, and V. A. Shebanov—18, 1289 (1964) [45, 1879 (1963)]
Search for the Decay $\omega \rightarrow e^+ + e^-$. (E) V. V. Barmin, A. G. Dolgolenko, Yu. S. Krestnikov, A. G. Meshkovskiĭ, and V. A. Shebanov—18, 1427L (1964) [45, 2082L (1963)]

KRISHCHYAN, V. M.
Polarization of Cosmic Ray μ^+ Mesons. (E) T. L. Asatiani, V. M. Krishchyan, and R. O. Sharkhatunyan—18, 1176 (1964) [45, 1717 (1963)]

KRIVKO, A. I.
Layered and Filamentlike Structure of Superconducting Nb-Zr and Nb-Ti Alloys. (E) B. G. Lazarev, V. K. Khorenko, L. A. Kornienko, A. I. Krivko, A. A. Matsakova, and O. N. Ovcharenko—18, 1417L (1964) [45, 2068L (1963)]

KRUGLOV, S. P.
Comparison of the Absolute Measurements of the Energy in a Bremsstrahlung Beam Performed in the Laboratories of Different Countries. (E) A. P. Komar, S. P. Kruglov, and I. V. Lopatin—18, 565L (1964) [45, 824L (1963)]

KRUPNOV, A. F.
Four-Millimeter Molecular Beam Generator Based on the $1_{01}-0_{00}$ Transition in the CH_2O Molecule. (E) A. F. Krupnov and V. A. Skvortsov—18, 74 (1964) [45, 101 (1963)]
A 4 mm Fabry-Perot Maser. (E) A. F. Krupnov and V. A. Skvortsov—18, 1426L (1964) [45, 2080L (1963)]

KRYLOV, A. I.
An Investigation of Gamma Rays from Cs^{140}. (E) E. A. Zherebin, A. I. Krylov, V. I. Polikarpov, and N. N. Yuzvuk—18, 319 (1964) [45, 464 (1963)]

KULAKOV, V. M.
New Data on Alpha Decay of Americium Isotopes. (E) S. A. Baranov, V. M. Kulakov, and V. M. Shatinskiĭ—18, 1241 (1964) [45, 1811 (1963)]

KULEVSKIĬ, L. A.
Ruby Laser with Generation Duration of ~10 Milliseconds. (E) V. K. Konyukhov, L. A. Kulevskiĭ, and A. M. Prokhorov—18, 588 (1964) [45, 857 (1963)]

KUL'KOV, V. D.
Measurement of the Nuclear Specific Heats of Iridium and Rhenium in Iron Alloys. (E) A. V. Kogan, V. D. Kul'kov, L. P. Nikitin, N. M. Reĭnov, and M. F. Stel'makh—18, 1 (1964) [45, 1 (1963)]

KULYUKIN, M. M.
Measurement of the Total Muon Capture Probability in He^3. (E) O. A. Zaĭmidoroga, M. M. Kulyukin, B. Pontecorvo, R. M. Sulyaev, I. V. Falomkin, A. I. Filippov, V. M. Tsupko-Sitnikov, and Yu. A. Shcherbakov—18, 1235 (1964) [45, 1803 (1963)]

KUMEKIN, Yu. P.
Phenomenological Analysis of pp Interaction at 657 MeV. I. (T/E) L. S. Azhgireĭ, N. P. Klepikov, Yu. P. Kumekin, M. G. Meshcheryakov, S. B. Nurushev, and G. D. Stoletov—18, 810 (1964) [45, 1174 (1963)]

KUPRIYANOV, S. E.
Ionization of Positive Ions by Electrons. (E) S. E. Kupriyanov and Z. Z. Latypov—18, 558L (1964) [45, 815L (1963)]

KUSHAKEVICH, Yu. P.
Millisecond Thallium Isomers. (E) A. G. Demin, Yu. P. Kushakevich, E. A. Makoveev, I. M. Rozman, and A. F. Chachakov—18, 925 (1964) [45, 1344 (1963)]

KUTSAEVA, L. S.
Kinetic Energy of Fragments Produced in Symmetric Fission of U^{235}. (E) P. P. D'yachenko, B. D. Kuz'minov, L. S. Kutsaeva, V. N. Okolovich, G. N. Smirenkin, and A. N. Utyuzhnikov—18, 6 (1964) [45, 8 (1963)]

KUZ'MINOV, B. D.
Kinetic Energy of Fragments Produced in Symmetric Fission of U^{235}. (E) P. P. D'yachenko, B. D. Kuz'minov, L. S. Kutsaeva, V. N. Okolovich, G. N. Smirenkin, and A. N. Utyuzhnikov—18, 6 (1964) [45, 8 (1963)]

KUZNETSOV, A. A.
$\bar{\Lambda}$ Hyperon Production by 7—8 GeV Negative Pions in Hydrogen. (E) V. A. Belyakov, V. I. Veksler, N. M. Viryasov, I. Vrana, Kim Hi In, E. N. Kladnitskaya, A. A. Kuznetsov, A. Mikhul, Nguyen Dinh Tu, M. I. Solov'ev, T. Hofmokl, and Ch'eng Ling-Yen—18, 64 (1964) [45, 88 (1963)]
Polarization of Λ Hyperons Produced in π^--C Interactions at 7 GeV. (E) V. A. Belyakov, Wang Yung-Chang, V. I. Veksler, N. M. Viryasov, Tu Yuan-T'sai, Kim Hi In, E. M. Kladnitskaya, A. A. Kuznetsov, Nguyen Din Tu, V. I. Penev, and M. I. Solov'ev—18, 66 (1964) [45, 90 (1963)]

LANG, I. G.
Mobility of Small-radius Polarons at Low Temperatures. (T) I. G. Lang and Yu. A. Firsov—18, 262L (1964) [45, 378L (1963)]

LARKIN, A. I.

Regge Poles in the Nonrelativistic Problem with Nonlocal and Singular Interaction. (T) V. G. Vaks and A. I. Larkin—18, 548 (1964) [45, 800 (1963)]

A Phenomenological Approach to the Theory of the Nucleus. (T) A. B. Migdal and A. I. Larkin—18, 717 (1964) [45, 1036 (1963)]

Amplitude Singularities at $l = -1$ in the Bethe-Salpeter Equations. (T) V. G. Vaks and A. I. Larkin—18, 751 (1964) [45, 1087 (1963)]

LATYPOV, Z. Z.

Ionization of Positive Ions by Electrons. (E) S. E. Kupriyanov and Z. Z. Latypov—18, 558L (1964) [45, 815L (1963)]

LAZAREV, B. G.

Critical Magnetic Fields of Superconducting Beryllium Films. (E) B. G. Lazarev, E. E. Semenenko, and A. I. Sudovtsov—18, 270L (1964) [45, 391L (1963)]

Cross Section for Gamma-ray Absorption by Carbon in the Giant Resonance Region. (E) N. A. Burgov, G. V. Danilyan, B. S. Dolbilkin, L. E. Lazareva, and F. A. Nikolaev—18, 1159 (1964) [45, 1693 (1963)]

Layered and Filamentlike Structure of Superconducting Nb-Zr and Nb-Ti Alloys. (E) B. G. Lazarev, V. K. Khorenko, L. A. Kornienko, A. I. Krivko, A. A. Matsakova, and O. N. Ovcharenko—18, 1417L (1964) [45, 2068L (1963)]

LAZAREVA, L. E.

Inelastic Scattering of γ Rays on Ag^{107}. (E) O. V. Bogdankevich, B. S. Dolbilkin, L. E. Lazareva, and F. A. Nikolaev—18, 606 (1964) [45, 882 (1963)]

LEND'EL, V. I.

πN Scattering Partial Waves with Account of ππ Interaction. (T) P. S. Isaev, V. I. Lend'el, and V. A. Meshcheryakov—18, 205 (1964) [45, 294 (1963)]

LEVINA, S. S.

The Odd Component of the Galvanomagnetic Effect in the Ferrimagnetic Compound Mn_5Ge_2. (E) S. S. Levina, V. N. Novogrudskiĭ, and I. G. Fakidov—18, 38 (1964) [45, 52 (1963)]

LEVINTOV, I. I.

Comparison of Elastic πp and pp Scattering on the Basis of a Model with Three Regge Poles. (T) V. P. Kanavets, I. I. Levintov, and B. V. Morozov—18, 467 (1964) [45, 679 (1963)]

Polarization in pp Scattering at 8.5 BeV. (E) V. P. Kanavets, I. I. Levintov, B. V. Morozov, and M. D. Shafranov—18, 874L (1964) [45, 1272L (1963)]

Determination of the Real Part of the Scattering Amplitude for an Asymptotic Power Law Behavior of the Imaginary Part. (T) I. I. Levintov—18, 876L (1964) [45, 1275L (1963)]

LEVKOVSKIĬ, V. N.

Empirical Behavior of the (n, p) Cross Section for 14—15 MeV Neutrons. (E) V. N. Levkovskiĭ—18, 213 (1964) [45, 305 (1963)]

LIFSHITZ, I. M.

A Nonthreshold Photoconductive Effect in Metals with Intersecting Bands. (T) M. I. Kaganov and I. M. Lifshitz—18, 655 (1964) [45, 948 (1963)]

LOBOV, G. A.

Radiative Capture of μ^- Mesons in Hydrogen. (T) G. A. Lobov—18, 490 (1964) [45, 713 (1963)]

LONGO, D.

Neutron Resonances in Bromine. (E) D. Zeliger, N. Iliescu, Kim Hi San, D. Longo, L. B. Pikel'ner, and É. I. Sharapov—18, 889 (1964) [45, 1294 (1963)]

LOPATIN, I. V.

Comparison of the Absolute Measurements of the Energy in a Bremsstrahlung Beam Performed in the Laboratories of Different Countries. (E) A. P. Komar, S. P. Kruglov, and I. V. Lopatin—18, 565L (1964) [45, 824L (1963)]

LOVCHIKOVA, G. N.

Asymmetry of Double Scattering of Neutrons on Helium. (E) P. S. Ot-stavnov, G. N. Lovchikova, and V. I. Popov—18, 1202 (1964) [45, 1754 (1963)]

LOZHKIN, O. V.

Formation of Fast Residual Nuclei. (E) V. I. Bogatin, O. V. Lozhkin, and Yu. P. Yakovlev—18, 1420L (1964) [45, 2072L (1963)]

Short Range Products From Nuclear Disintegrations Induced by Protons with Energies Between 2 and 9 GeV. (E) P. A. Gorichev, O. V. Lozhkin, and N. A. Perfilov—18, 1222 (1964) [45, 1784 (1963)]

LUSHCHIKOV, V. I.

Dynamic Proton Polarization at 0.5°K. (E) B. S. Neganov, L. B. Parfenov, V. I. Lushchikov, and Yu. V. Taran—18, 273L (1964) [45, 394L (1963)]

LYAGIN, I. V.

K_{e5} Decay. (T) V. A. Kolkunov and I. V. Lyagin—18, 1379 (1964) [45, 2009 (1963)]

LYUL'KA, V. A.

Lepton Decays of Hypernuclei. (T) V. A. Lyul'ka—18, 117 (1964) [45, 164 (1963)]

MAKAROV, M. M.

Angular Distributions of Multiply Charged Particles Produced by 75—350 MeV Protons. (E) M. M. Makarov—18, 41 (1964) [45, 56 (1963)]

MAKOVEEV, E. A.

Millisecond Thallium Isomers. (E) A. G. Demin, Yu. P. Kushakevich, E. A. Makoveev, I. M. Rozman, and A. F. Chachakov—18, 925 (1964) [45, 1344 (1963)]

MAL'TSEV, V. V.

The Determination of Deuterium Plasma Density by Means of a Tritium Ion Beam. (E) B. M. Gokhberg, I. K. Kikoin, A. S. Knyazyatov, V. V. Mal'tsev, and G. A. Otroshchenko—18, 295 (1964) [45, 428 (1963)]

MAL'TSEVA, N. S.

Secondary Reactions of Astatine Production During Bombardment of Bi and Pb with 3 to 10 BeV Protons. (E) N. S. Mal'tseva, V. N. Mekhedov, and V. N. Rybakov—18, 585 (1964) [45, 852 (1963)]

MALYSHEV, A. V.

Contribution to the Statistical Theory of Nuclear Level Spacing. (T) A. V. Malyshev—18, 221 (1964) [45, 316 (1963)]

MALYUTA, Yu. M.

Regge Trajectory for the Positronium Atom. (T) Yu. M. Malyuta—18, 804 (1964) [45, 1167 (1963)]

MAMIDZHANYAN, É. A.

Energy Spectrum of Nuclear-active Particles in Extensive Air Showers. (E) Kh. P. Babayan, N. G. Boyadzhyan, N. L. Grigorov, É. A. Mamidzhanyan, Ch. A. Tret'yakova, and V. Ya. Shestoperov—18, 288 (1964) [45, 418 (1963)]

MANDZHAVIDZE, Z. Sh.

Observation of $K_2^0 \to \pi^+ + \pi^- + \pi^0$ Decays. (E) M. Kh. Anikina, O. N. Gogitidze, M. S. Zhuravleva, A. A. Kozlov, D. M. Kotlyarevskiĭ, Z. Sh. Mandzhavidze, A. N. Mestvirishvili, D. Neagu, E. O. Okonov, N. I. Petrov, A. M. Rozanova, V. A. Rusakov, G. G. Takhtamyshev, L. V. Chkhaidze, Wu Tsun-fan, and A. A. Tserelov—18, 323 (1964) [45, 469 (1963)]

MANENKOV, A. A.
Relaxation Processes in the Paramagnetic Resonance of Gd^{3+} in CaF_2. (E) A. A. Manenkov and Yu. E. Pol'skiĭ—18, 985 (1964) [45, 1425 (1963)]

MARTALOGU, N.
Scattering of Protons With Energies Below 5 MeV on Ne^{20}. (E) H. Hulubei, J. Francz, N. Martalogu, N. Scintei, M. Ivascu, A. Berinde, and I. Neamu—18, 1248 (1964) [45, 1822 (1963)]

MARTYNOV, G. A.
Determination of Correlative Functions for Dense Gases and Liquids. I. System of Rigid Spheres. (T) G. A. Martynov—18, 450 (1964) [45, 656 (1963)]

MATEVOSYAN, É. M.
Observation of Tracks of Fast Particles in a Two-electrode Spark Chamber in a Magnetic Field. (E) A. I. Alikhanyan, T. L. Asatiani, É. M. Matevosyan, A. A. Nazaryan, and R. O. Sharkhatunyan—18, 1154L (1964) [45, 1684L (1963)]

MATINYAN, S. G.
The η^0 Meson and the Mass Difference of the K_1^0 and K_2^0 Mesons. (T) S. G. Matinyan—18, 267L (1964) [45, 386L (1963)]

MATSAKOVA, A. A.
Layered and Filamentlike Structure of Superconducting Nb-Zr and Nb-Ti Alloys. (E) B. G. Lazarev, V. K. Khorenko, L. A. Kornienko, A. I. Krivko, A. A. Matsakova, and O. N. Ovcharenko—18, 1417L (1964) [45, 2068L (1963)]

MATTHIES, S.
Determination of the Mutual Arrangement of Nucleon Associations in a Nucleus by the Directed Orbital Method. (T/E) S. Matthies, V. G. Neudachin, and Yu. F. Smirnov—18, 79 (1964) [45, 107 (1963)]

Application of Some Nuclear Theory Methods to Molecular Collisions. (T) S. Matthies and V. G. Neudachin—18, 95 (1964) [45, 131 (1963)]

MEKHEDOV, V. N.
Secondary Reactions of Astatine Production During Bombardment of Bi and Pb with 3 to 10 BeV Protons. (E) N. S. Mal'tseva, V. N. Mekhedov, and V. N. Rybakov—18, 585 (1964) [45, 852 (1963)]

MELIK-BARKHUDAROV, T. K.
Microscopic Derivation of the Ginzburg-Landau Equations for an Anisotropic Superconductor. (T) L. P. Gor'kov and T. K. Melik-Barkhudarov—18, 1031 (1964) [45, 1493 (1963)]

MERZON, G. I.
Inelastic Scattering of 2.66-GeV π^- Mesons on Nucleons and Carbon Nuclei. (E) G. I. Merzon and L. P. Kotenko—18, 14 (1964) [45, 18 (1963)]

MESHCHERYAKOV, V. A.
πN Scattering Partial Waves with Account of $\pi\pi$ Interaction. (T) P. S. Isaev, V. I. Lend'el, and V. A. Meshcheryakov—18, 205 (1964) [45, 294 (1963)]

Phenomenological Analysis of pp Interaction at 657 MeV. I. (T/E) L. S. Azhgireĭ, N. P. Klepikov, Yu. P. Kumekin, M. G. Meshcheryakov, S. B. Nurushev, and G. D. Stoletov—18, 810 (1964) [45, 1174 (1963)]

The $\pi + N \rightarrow \pi + \gamma + N$ Reaction and the Constant for Pion-pion Photoproduction. (T) V. A. Meshcheryakov, L. L. Nemenov, and L. D. Solov'ev—18, 820 (1964) [45, 1188 (1963)]

MESHKOVSKIĬ, A. G.
Evidence for the $\omega \rightarrow \pi^0 + \gamma$ Decay. (E) V. V. Barmin, A. G. Dolgolenko, Yu. S. Krestnikov, A. G. Meshkovskiĭ, Yu. P. Nikitin, and V. A. Shebanov—18, 1289 (1964) [45, 1879 (1963)]

Search for the Decay $\omega \rightarrow e^+ + e^-$. (E) V. V. Barmin, A. G. Dolgolenko, Yu. S. Krestnikov, A. G. Meshkovskiĭ, and V. A. Shebanov—18, 1427L (1964) [45, 2082L (1963)]

MESTVIRISHVILI, A. N.
Observation of $K_2^0 \rightarrow \pi^+ + \pi^- + \pi^0$ Decays. (E) M. Kh. Anikina, O. N. Gogitidze, M. S. Zhuravleva, A. A. Kozlov, D. M. Kotlyarevskiĭ, Z. Sh. Mandzhavidze, A. N. Mestvirishvili, D. Neagu, E. O. Okonov, N. I. Petrov, A. M. Rozanova, V. A. Rusakov, G. G. Takhtamyshev, L. V. Chkhaidze, Wu Tsun-fan, and A. A. Tserelov—18, 323 (1964) [45, 469 (1963)]

MIGDAL, A. B.
A Phenomenological Approach to the Theory of the Nucleus. (T) A. B. Migdal and A. I. Larkin—18, 717 (1964) [45, 1036 (1963)]

MIHUL, E. K.
Baryon Momentum Spectrum in Inelastic Collisions Between Fast Pions and Nucleons. (T) V. S. Barashenkov, D. I. Blokhintsev, E. K. Mihul, I. Patera, and G. L. Semashko—18, 263L (1964) [45, 381L (1963)]

MIKHAĬLOV, I. N.
Accuracy of the Generalized Hartree-Fock Method in Nuclear Physics. (T) I. N. Mikhaĭlov—18, 761 (1964) [45, 1102 (1963)]

MIKHAĬLOV, V. A.
Track Spark Chamber. (E) V. A. Mikhaĭlov, V. N. Roĭnishvili, and G. E. Chikovani—18, 561L (1964) [45, 818L (1963)]

MIKHAĬLOV, V. D.
Concerning One Reaction with Colliding Electron Beams. (T) V. D. Mikhaĭlov—18, 265L (1964) [45, 383L (1963)]

MIKHAĬLOVSKAYA, L. V.
Drift Instability in a Dense Plasma. (T) L. V. Mikhaĭlovskaya and A. B. Mikhaĭlovskiĭ—18, 1077 (1964) [45, 1566 (1963)]

MIKHAĬLOVSKIĬ, A. B.
Drift Instability in a Dense Plasma. (T) L. V. Mikhaĭlovskaya and A. B. Mikhaĭlovskiĭ—18, 1077 (1964) [45, 1566 (1963)]

MIKHEEV, V. L.
Formation of a Spontaneously Fissioning Isomer in Reactions Involving α Particles and Deuterons. (E) G. N. Flerov, S. M. Polikanov, K. A. Gavrilov, V. L. Mikheev, V. P. Perelygin, and A. A. Pleve—18, 964 (1964) [45, 1396 (1963)]

MIKHUL, A.
$\bar{\Lambda}$ Hyperon Production by 7—8 GeV Negative Pions in Hydrogen. (E) V. A. Belyakov, V. I. Veksler, N. M. Viryasov, I. Vrana, Kim Hi In, E. N. Kladnitskaya, A. A. Kuznetsov, A. Mikhul, Nguyen Dinh Tu, M. I. Solov'ev, T. Hofmokl, and Ch'eng Ling-Yen—18, 64 (1964) [45, 88 (1963)]

MILEKHIN, G. A.
The Doubly Logarithmic Approximation in Quantum Electrodynamics. (T) G. A. Milekhin and E. S. Fradkin—18, 1323 (1964) [45, 1926 (1963)]

MINA, R. T.
Investigation of the Fermi Surface in Lead by the Cyclotron Resonance Method. (E) R. T. Mina and M. S. Khaĭkin—18, 896 (1964) [45, 1304 (1963)]

Properties of Magnetoplasma Waves in Bismuth Single Crystals. (T/E) M. S. Khaĭkin, L. A. Fal'kovskiĭ, V. S. Édel'man, and R. T. Mina—18, 1167 (1964) [45, 1704 (1963)]

MOKHNACH, A. V.
Measurement of Asymmetry in the $N^{14}(d, p)N^{15}$ Reaction with Elastically Scattered Deuterons. (E) Yu. V. Gofman, V. N. Dobrikov N. I. Zaika, A. V. Mokhnach, and O. F. Nemets—18, 906 (1964) [45, 1317 (1963)]

MOROZOV, A. I.

Typical Structure of a Toroidal Magnetic Field. (T) A. I. Morozov and L. S. Solov'ev—18, 660 (1964) [45, 955 (1963)]

MOROZOV, B. V.

Comparison of Elastic πp and pp Scattering on the Basis of a Model with Three Regge Poles. (T) V. P. Kanavets, I. I. Levintov, and B. V. Morozov—18, 467 (1964) [45, 679 (1963)]

Polarization in pp Scattering at 8.5 BeV. (E) V. P. Kanavets, I. I. Levintov, B. V. Morozov, and M. D. Shafranov—18, 874L (1964) [45, 1272L (1963)]

MORRISON, P.

On the Absorption of Gamma Rays in Intergalactic Space. (T) P. Goldreich and P. Morrison—18, 239 (1964) [45, 344 (1963)]

MOSKALENKO, S. A.

Second-order Phase Transition Associated with Bose-Einstein Condensation of Excitons in a Deformed Lattice. (T) S. A. Moskalenko—18, 799 (1964) [45, 1159 (1963)]

MUKHAMEDZHANOV, A. M.

Longitudinal Polarization of Electrons in Allowed Beta Transitions. (T) A. M. Mukhamedzhanov—18, 1405 (1964) [45, 2048 (1963)]

MUKHTAROV, Ch. K.

Molecular Gyromagnetism. (T) Ch. K. Mukhtarov—18, 131 (1964) [45, 185 (1963)]

MUR, V. D.

Asymptotic Expression for the Total γγ Scattering Cross Section at High Energies. (T) V. D. Mur—18, 727 (1964) [45, 1051 (1963)]

Regge Poles in Photoproduction Amplitude. (E) A. V. Berkov, E. D. Zhizhin, V. D. Mur, and Yu. P. Nikitin—18, 1091 (1964) [45, 1585 (1963)]

NAGIBAROV, V. R.

The Opto-acoustic Maser Effect. (T) V. R. Nagibarov and U. Kh. Kopvillem—18, 1377 (1964) [45, 2006 (1963)]

NAGORSKIĬ, G. A.

Regge Poles in the Scattering from a δ Potential. (T) V. M. Arutyunyan, I. I. Gol'dman, and G. A. NagorskiĬ—18, 172 (1964) [45, 246 (1963)]

NAZAROV, N. I.

Experimental Observation of Landau Damping in a Plasma. (E) V. V. Dolgopolov, A. I. Ermakov, N. I. Nazarov, K. N. Stepanov, and V. T. Tolok—18, 866L (1964) [45, 1260L (1963)]

NAZARYAN, A. A.

Observation of Tracks of Fast Particles in a Two-electrode Spark Chamber in a Magnetic Field. (E) A. I. Alikhanyan, T. L. Asatiani, É. M. Matevosyan, A. A. Nazaryan, and R. O. Sharkhatunyan—18, 1154L (1964) [45, 1684L (1963)]

NEAGU, D.

Observation of $K_2^0 \to \pi^+ + \pi^- + \pi^0$ Decays. (E) M. Kh. Anikina, O. N. Gogitidze, M. S. Zhuravleva, A. A. Kozlov, D. M. Kotlyarevskiĭ, Z. Sh. Mandzhavidze, A. N. Mestvirishvili, D. Neagu, E. O. Okonov, N. I. Petrov, A. M. Rozanova, V. A. Rusakov, G. G. Takhtamyshev, L. V. Chkhaidze, Wu Tsun-fan, and A. A. Tserelov—18, 323 (1964) [45, 469 (1963)]

NEAMU, I.

Scattering of Protons With Energies Below 5 MeV on Ne^{20}. (E) H. Hulubei, J. Francz, N. Martalogu, N. Scintei, M. Ivascu, A. Berinde, and I. Neamu—18, 1248 (1964) [45, 1822 (1963)]

NEDLIN, G. M.

Thermal EMF Due to Electron-magnon Scattering in Ferromagnetic Metals. (T) L. É. Gurevich and G. M. Nedlin—18, 396 (1964) [45, 576 (1963)]

NEDOVESOV, V. G.

Alpha Decay of Curium Isotopes. (E) B. S. Dzhelepov, R. B. Ivanov, V. G. Nedovesov, and V. P. Chechev—18, 937 (1964) [45, 1360 (1963)]

NEGANOV, B. S.

Dynamic Proton Polarization at 0.5°K. (E) B. S. Neganov, L. B. Parfenov, V. I. Lushchikov, and Yu. V. Taran—18, 273L (1964) [45, 394L (1963)]

NEMENOV, L. L.

The $\pi + N \to \pi + \gamma + N$ Reaction and the Constant for Pion-pion Photoproduction. (T) V. A. Meshcheryakov, L. L. Nemenov, and L. D. Solov'ev—18, 820 (1964) [45, 1188 (1963)]

NEMETS, O. F.

Elastic Scattering of Deuterons by Nitrogen, Oxygen, and Argon. (E) O. F. Nemets, F. Picard, L. I. Slyusarenko, and V. V. TokarevskiĬ—18, 583 (1964) [45, 850 (1963)]

Measurement of Asymmetry in the $N^{14}(d, p)N^{15}$ Reaction with Elastically Scattered Deuterons. (E) Yu. V. Gofman, V. N. Dobrikov N. I. Zaika, A. V. Mokhnach, and O. F. Nemets—18, 906 (1964) [45, 1317 (1963)]

NEMILOV, Yu. A.

Polarization of Elastically Scattered 6.5-MeV Deuterons. (E) Yu. A. Nemilov and L. A. Pobedonostsev—18, 76 (1964) [45, 103 (1963)]

Angular Distribution of the Polarization of Neutrons from the $C^{12}(d, n)N^{13}$ Reaction. (E) N. P. Babenko, I. O. Konstantinov, and Yu. A. Nemilov—18, 959 (1964) [45, 1389 (1963)]

NEUDACHIN, V. G.

Determination of the Mutual Arrangement of Nucleon Associations in a Nucleus by the Directed Orbital Method. (T/E) S. Matthies, V. G. Neudachin, and Yu. F. Smirnov—18, 79 (1964) [45, 107 (1963)]

Application of Some Nuclear Theory Methods to Molecular Collisions. (T) S. Matthies and V. G. Neudachin—18, 95 (1964) [45, 131 (1963)]

NEZLIN, M. V.

Acceleration of Ions in Plasma Beams. (E) M. V. Nezlin and A. M. Solntsev—18, 576 (1964) [45, 840 (1963)]

NGUYEN Dinh Tu

$\bar{\Lambda}$ Hyperon Production by 7–8 GeV Negative Pions in Hydrogen. (E) V. A. Belyakov, V. I. Veksler, N. M. Viryasov, I. Vrana, Kim Hi In, E. N. Kladnitskaya, A. A. Kuznetsov, A. Mikhul, Nguyen Dinh Tu, M. I. Solov'ev, T. Hofmokl, and Ch'eng Ling-Yen—18, 64 (1964) [45, 88 (1963)]

Polarization of Λ Hyperons Produced in π^--C Interactions at 7 GeV. (E) V. A. Belyakov, Wang Yung-Chang, V. I. Veksler, N. M. Viryasov, Tu Yuan-T'sai, Kim Hi In, E. M. Kladnitskaya, A. A. Kuznetsov, Nguyen Din Tu, V. I. Penev, and M. I. Solov'ev—18, 66 (1964) [45, 90 (1963)]

NGUYEN Van Hieu

Meson Production in Neutrino Experiments and the Isotopic Structure of Weak Interactions. (T) Nguyen Van Hieu—18, 143 (1964) [45, 202 (1963)]

Regge Poles and the Asymptotic Behavior of the Cross Sections for Some Weak-interaction Processes. (T) Nguyen Van Hieu—18, 374 (1964) [45, 544 (1963)]

NICHIPORUK, B.

Fluctuations of Electron-photon Showers in Xenon. (E) B. Nichiporuk and Z. S. Strugal'skiĬ—18, 10 (1964) [45, 12 (1963)]

NIKITIN, L. P.

Measurement of the Nuclear Specific Heats of Iridium and Rhenium in Iron Alloys. (E) A. V. Kogan, V. D. Kul'kov, L. P. Nikitin, N. M. Reĭnov, and M. F. Stel'makh—18, 1 (1964) [45, 1 (1963)]

NIKITIN, S. A.
Shift of the Ferromagnetism-antiferromagnetism Transition Point in Dysprosium Under Hydrostatic Pressure. (E) K. P. Belov, S. A. Nikitin and A. V Ped'ko—18, 20 (1964) [45, 26 (1963)]

NIKITIN, V. A.
Small-angle Proton-proton Elastic Scattering at 6 and 10 GeV. (E) L. F. Kirillova, V. A. Nikitin, A. A. Nomofilov, V. A. Sviridov, L. N. Strunov, and M. G. Shafranova—18, 867L (1964) [45, 1261L (1963)]

NIKITIN, Yu. P.
Regge Poles in Photoproduction Amplitude. (E) A. V. Berkov, E. D. Zhizhin, V. D. Mur, and Yu. P. Nikitin—18, 1091 (1964) [45, 1585 (1963)]
Evidence for the $\omega \rightarrow \pi^0 + \gamma$ Decay. (E) V. V. Barmin, A. G. Dolgolenko, Yu. S. Krestnikov, A. G. Meshkovskiĭ, Yu. P. Nikitin, and V. A. Shebanov—18, 1289 (1964) [45, 1879 (1963)]

NIKOLAEV, F. A.
Inelastic Scattering of γ Rays on Ag^{107}. (E) O. V. Bogdankevich, B. S. Dolbilkin, L. E. Lazareva, and F. A. Nikolaev—18, 606 (1964) [45, 882 (1963)]
Cross Section for Gamma-ray Absorption by Carbon in the Giant Resonance Region. (E) N. A. Burgov, G. V. Danilyan, B. S. Dolbilkin, L. E. Lazareva, and F. A. Nikolaev—18, 1159 (1964) [45, 1693 (1963)]

NIKOLAEV, I. N.
Photomagnetic Effects in Germanium in Strong Magnetic Fields. (E) I. N. Nikolaev—18, 1150L (1964) [45, 1678L (1963)]

NIKOLAEV, V. I.
Investigation of the Magnetostriction of the Metamagnetic Alloy $MnAu_2$. (E) V. I. Nikolaev, A. I. Karchevskiĭ, V. G. Tsinoev, and B. V. Vasil'ev—18, 331 (1964) [45, 480 (1963)]
Studies of Temperature Dependence of Mössbauer Spectra of Fe^{57} and Sn^{119} in Antiferromagnetic $FeSn_2$. (E) V. I. Nikolaev, Yu. I. Shcherbina, and S. S. Yakimov—18, 878L (1964) [45, 1277L (1963)]

NOMOFILOV, A. A.
Small-angle Proton-proton Elastic Scattering at 6 and 10 GeV. (E) L. F. Kirillova, V. A. Nikitin, A. A. Nomofilov, V. A. Sviridov, L. N. Strunov, and M. G. Shafranova—18, 867L (1964) [45, 1261L (1963)]

NORMAN, G. E.
Semi-empirical Method of Calculating the Cross Section for Elastic Scattering of Slow Electrons by Atoms. (T) L. M. Biberman and G. E. Norman—18, 1353 (1964) [45, 1970 (1963)]

NOVOGRUDSKIĬ, V. N.
The Odd Component of the Galvanomagnetic Effect in the Ferrimagnetic Compound Mn_5Ge_2. (E) S. S. Levina, V. N. Novogrudskiĭ, and I. G. Fakidov—18, 38 (1964) [45, 52 (1963)]

NURUSHEV, S. B.
Real Part of the Amplitude for Elastic pp Forward Scattering. (T) L. S. Azhgirei and S. B. Nurushev—18, 412 (1964) [45, 599 (1963)]
Phenomenological Analysis of pp Interaction at 657 MeV. I. (T/E) L. S. Azhgirei, N. P. Klepikov, Yu. P. Kumekin, M. G. Meshcheryakov, S. B. Nurushev, and G. D. Stoletov—18, 810 (1964) [45, 1174 (1963)]

OCHKUR, V. I.
The Born-Oppenheimer Method in the Theory of Atomic Collisions. (T) V. I. Ochkur—18, 503 (1964) [45, 734 (1963)]

OGANESYAN, K. O.
Spectra of Charged Mesons Emitted at 90° in np Collisions Involving 600 MeV Neutrons. (E) K. O. Oganesyan and V. A. Yarbá—18, 1257 (1964) [45, 1835 (1963)]

OGIEVETSKIĬ, V. I.
On Interacting Fields with Definite Spin. (T) V. I. Ogievetskiĭ and I. V. Polubarinov—18, 166 (1964) [45, 237 (1963)]
On the Theory of the Neutral Vector Field with Spin 1. (T) V. I. Ogievetskiĭ and I. V. Polubarinov—18, 487 (1964) [45, 709 (1963)]
Interacting Spin 1 Fields and Symmetry Properties. (T) V. I. Ogievetskiĭ and I. V. Polubarinov—18, 668 (1964) [45, 966 (1963)]

OKOLOVICH, V. N.
Kinetic Energy of Fragments Produced in Symmetric Fission of U^{235}. (E) P. P. D'yachenko, B. D. Kuz'minov, L. S. Kutsaeva, V. N. Okolovich, G. N. Smirenkin, and A. N. Utyuzhnikov—18, 6 (1964) [45, 8 (1963)]

OKONOV, E. O.
Observation of $K_2^0 \rightarrow \pi^+ + \pi^- + \pi^0$ Decays. (E) M. Kh. Anikina, O. N. Gogitidze, M. S. Zhuravleva, A. A. Kozlov, D. M. Kotlyarevskiĭ, Z. Sh. Mandzhavidze, A. N. Mestvirishvili, D. Neagu, E. O. Okonov, N. I. Petrov, A. M. Rozanova, V. A. Rusakov, G. G. Takhtamyshev, L. V. Chkhaidze, Wu Tsun-fan, and A. A. Tserelov—18, 323 (1964) [45, 469 (1963)]

OKUN', L.
On Processes Determined by Fermion Regge Poles. (T) V. Gribov, L. Okun', and I. Pomeranchuk—18, 769 (1964) [45, 1114 (1963)]

OPARIN, V. A.
Ionization of Gases by Fast Helium Atoms and Singly-charged Helium Ions. (E) E. S. Solov'ev, R. N. Il'in, V. A. Oparin, and N. V. Fedorenko—18, 342 (1964) [45, 496 (1963)]

ORAEVSKIĬ, A. N.
Negative Temperature States in Chemical Reactions. (T/E) A. N. Oraevskiĭ—18, 126 (1964) [45, 177 (1963)]
Maser With Two Resonators in Series. (E/T) N. G. Basov, A. N. Oraevskiĭ, G. M. Strakhovskiĭ, and V. M. Tatarenkov—18, 1211 (1964) [45, 1768 (1963)]

ORLOV, Yu. F.
Anomalous Resonance Spin Flip of a Particle in a Magnetic Field. (T) Kh. A. Simonyan and Yu. F. Orlov—18, 123 (1964) [45, 173 (1963)]
Motion of a Charged Particle in a Straight Helical-cubic Magnetic Field. (T) Yu. F. Orlov—18, 644 (1964) [45, 932 (1963)]
On the Radiative Attenuation Theory of Radial Oscillations of an Electron in a Magnetic Field. (T) S. A. Khelfets and Yu. F. Orlov—18, 844 (1964) [45, 1225 (1963)]

OSTROVSKIĬ, L. A.
Parametric Generation of Electromagnetic Waves in a Magnetoactive Plasma. (T) L. A. Ostrovskiĭ and N. S. Stepanov—18, 1018 (1964) [45, 1473 (1963)]

OTROSHCHENKO, G. A.
The Determination of Deuterium Plasma Density by Means of a Tritium Ion Beam. (E) B. M. Gokhberg, I. K. Kikoin, A. S. Knyazyatov, V. V. Mal'tsev, and G. A. Otroshchenko—18, 295 (1964) [45, 428 (1963)]

OT-STAVNOV, P. S.
Asymmetry of Double Scattering of Neutrons on Helium. (E) P. S. Ot-stavnov, G. N. Lovchikova, and V. I. Popov—18, 1202 (1964) [45, 1754 (1963)]

OVCHARENKO, O. N.
Layered and Filamentlike Structure of Superconducting Nb-Zr and Nb-Ti Alloys. (E) B. G. Lazarev, V. K. Khorenko, L. A. Kornienko, A. I. Krivko, A. A. Matsakova, and O. N. Ovcharenko—18, 1417L (1964) [45, 2068L (1963)]

OZHOGIN, V. I.
The Antiferromagnets $CoCO_3$, CoF_2, and $FeCO_3$ in Strong Fields. (E) V. I. Ozhogin—18, 1156L (1964) [45, 1687L (1963)]

PANKRATOV, V. M.
(He^3, α) Reaction on C^{12} and Mg^{24} Nuclei. (E) V. M. Pankratov and I. N. Serikov—18, 627 (1964) [45, 910 (1963)]

PANTUEV, V. S.
Measurement of the Cross Section of the Reaction $C^{12}(p, pn)C^{11}$ at 9 BeV. (E) B. I. Bekker, V. S. Pantuev, V. A. Sviridov, and M. N. Khachaturyan—18, 872L (1964) [45, 1269L (1963)]

Total Cross Section for the Interaction Between Neutrons and Protons at 5.5 GeV. (E) M. N. Khachaturyan and V. S. Pantuev—18, 1239 (1964) [45, 1808 (1963)]

PARFENOV, L. B.
Dynamic Proton Polarization at 0.5°K. (E) B. S. Neganov, L. B. Parfenov, V. I. Lushchikov, and Yu. V. Taran—18, 273L (1964) [45, 394L (1963)]

PATASHINSKIĬ, A. Z.
An Investigation of the S Matrix in the Complex Angular Momentum Plane in the Quasiclassical Case. (T) A. Z. Patashinskiĭ, V. L. Pokrovskiĭ, and I. M. Khalatnikov—18, 522 (1964) [45, 760 (1963)]

Quasiclassical Scattering in a Centrally Symmetric Field. (T) A. Z. Patashinskiĭ, V. L. Pokrovskiĭ, and I. M. Khalatnikov—18, 683 (1964) [45, 989 (1963)]

PATERA, I.
Baryon Momentum Spectrum in Inelastic Collisions Between Fast Pions and Nucleons. (T) V. S. Barashenkov, D. I. Blokhintsev, E. K. Mihul, I. Patera, and G. L. Semashko—18, 263L (1964) [45, 381L (1963)]

PAVLOV, V. P.
Physical Region of the Five-point Function in Terms of Five Invariants. (T) V. P. Pavlov—18, 1105 (1964) [45, 1606 (1963)]

PED'KO, A. V.
Shift of the Ferromagnetism-antiferromagnetism Transition Point in Dysprosium Under Hydrostatic Pressure. (E) K. P. Belov, S. A. Nikitin and A. V. Ped'ko—18, 20 (1964) [45, 26 (1963)]

PELETMINSKIĬ, S. V.
Coherent Amplification of Spin Waves. (T) A. I. Akhiezer, V. G. Baryakhtar, and S. V. Peletminskiĭ—18, 235 (1964) [45, 337 (1963)]

Structure of Singularities and Their Motion in Nonlinear Electrodynamics. (T) S. V. Peletminskiĭ and A. A. Yatsenko—18, 1117 (1964) [45, 1625 (1963)]

PENEV, V. I.
Polarization of Λ Hyperons Produced in π^--C Interactions at 7 GeV. (E) V. A. Belyakov, Wang Yung-Chang, V. I. Veksler, N. M. Viryasov, Tu Yuan-T'sai, Kim Hi In, E. M. Kladnitskaya, A. A. Kuznetsov, Nguyen Din Tu, V. I. Penev, and M. I. Solov'ev—18, 66 (1964) [45, 90 (1963)]

PEREL', V. I.
Coherence of States in the Scattering of Modulated Light. (T) O. V. Konstantinov and V. I. Perel'—18, 195 (1964) [45, 279 (1963)]

Modulation of Scattered Light by Parametric Resonance. (T/E) E. B. Aleksandrov, O. V. Konstantinov, V. I. Perel', and V. A. Khodovoĭ—18, 346 (1964) [45, 503 (1963)]

PERELYGIN, V. P.
Half-life of a Spontaneously Fissioning Isomer. (E) V. P. Perelygin and S. P. Tret'yakova—18, 592 (1964) [45, 863 (1963)]

Formation of a Spontaneously Fissioning Isomer in Reactions Involving α Particles and Deuterons. (E) G. N. Flerov, S. M. Polikanov, K. A. Gavrilov, V. L. Mikheev, V. P. Perelygin, and A. A. Pleve—18, 964 (1964) [45, 1396 (1963)]

PERFILOV, N. A.
Short Range Products From Nuclear Disintegrations Induced by Protons with Energies Between 2 and 9 GeV. (E) P. A. Gorichev, O. V. Lozhkin, and N. A. Perfilov—18, 1222 (1964) [45, 1784 (1963)]

PETRASH, G. G.
Study of Pulsed Laser Generation in Neon and in Mixtures of Neon and Helium. (E) G. G. Petrash and I. N. Knyazev—18, 571 (1964) [45, 833 (1963)]

PETROV, L. A.
Observation of Radioactive Decay with Emission of Protons. (E) V. A. Karnaukhov, G. M. Ter-Akop'yan, L. A. Petrov, and V. G. Subbotin—18, 879L (1964) [45, 1280L (1963)]

PETROV, N. I.
Observation of $K_2^0 \to \pi^+ + \pi^- + \pi^0$ Decays. (E) M. Kh. Anikina, O. N. Gogitidze, M. S. Zhuravleva, A. A. Kozlov, D. M. Kotlyarevskiĭ, Z. Sh. Mandzhavidze, A. N. Mestvirishvili, D. Neagu, E. O. Okonov, N. I. Petrov, A. M. Rozanova, V. A. Rusakov, G. G. Takhtamyshev, L. V. Chkhaidze, Wu Tsun-fan, and A. A. Tserelov—18, 323 (1964) [45, 469 (1963)]

PETRUKHIN, V. I.
Measurement of the Mass Difference of Charged and Neutral Pions. (E) V. I. Petrukhin and Yu. D. Prokoshkin—18, 1190 (1964) [45, 1737 (1963)]

PETVIASHVILI, V. I.
Nonlinear Oscillations and Some Effects Due to a Longitudinal Current in a Plasma. (T) V. I. Petviashvili—18, 1014 (1964) [45, 1467 (1963)]

PICARD, F.
Elastic Scattering of Deuterons by Nitrogen, Oxygen, and Argon. (E) O. F. Nemets, F. Picard, L. I. Slyusarenko, and V. V. Tokarevskiĭ—18, 583 (1964) [45, 850 (1963)]

PIKEL'NER, L. B.
Neutron Resonances in Bromine. (E) D. Zeliger, N. Iliescu, Kim Hi San, D. Longo, L. B. Pikel'ner, and É. I. Sharapov—18, 889 (1964) [45, 1294 (1963)]

Investigation of Neutron Resonances in Rh^{103}. (E) Wang Nai-yen, I. Vizi, V. N. Efimov, E. N. Karzhavina, Kim Hi San, A. B. Popov, L. B. Pikel'ner, M. I. Pshitula, T. Stadnikov, Ch'eng Ling-Yen, É. I. Sharapov, I. I. Shelontsev, N. Yu. Shirikova, and Yu. S. Yazvitskiĭ—18, 1194 (1964) [45, 1743 (1963)]

PINAEV, V. S.
Some Neutrino Pair Production Processes in Stars. (T) V. S. Pinaev—18, 377 (1964) [45, 548 (1963)]

PITAEVSKIĬ, L. P.
Nonlinear Effects in Plasma Resonance. (T) A. V. Gurevich and L. P. Pitaevskiĭ—18, 855 (1964) [45, 1243 (1963)]

PLETNIKOV, A. A.
Elastic Scattering of 3.5-BeV/c π^- Mesons by Protons. (E) M. S. Aĭnutdinov, S. M. Zombkovskiĭ, A. A. Pletnikov, Ya. M. Selektor, and V. N. Shulyachenko—18, 271L (1964) [45, 392L (1963)]

PLEVE, A. A.
Formation of a Spontaneously Fissioning Isomer in Reactions Involving α Particles and Deuterons. (E) G. N. Flerov, S. M. Polikanov, K. A. Gavrilov, V. L. Mikheev, V. P. Perelygin, and A. A. Pleve—18, 964 (1964) [45, 1396 (1963)]

POBEDONOSTSEV, L. A.
Polarization of Elastically Scattered 6.5-MeV Deuterons. (E) Yu. A. Nemilov and L. A. Pobedonostsev—18, 76 (1964) [45, 103 (1963)]

PODGORETSKIĬ, M.
Effect of External Fields on Angular Correlations in Consecutive Electromagnetic Transitions. (T) L. Zastavenko and M. Podgoretskiĭ—18, 485 (1964) [45, 706 (1963)]

Resonance Reflection of Gamma Rays from a Crystal Surface. (T) M. I. Podgoretskiĭ—18, 536 (1964) [45, 780 (1963)]

Some Consequences of the Long Lifetime of η and ω Mesons. (T) V. G. Grishin and M. I. Podgoretskiĭ—18, 538 (1964) [45, 783 (1963)]

POKROVSKIĬ, V. L.
An Investigation of the S Matrix in the Complex Angular Momentum Plane in the Quasiclassical Case. (T) A. Z. Patashinskiĭ, V. L. Pokrovskiĭ, and I. M. Khalatnikov—18, 522 (1964) [45, 760 (1963)]

Quasiclassical Scattering in a Centrally Symmetric Field. (T) A. Z. Patashinskiĭ, V. L. Pokrovskiĭ, and I. M. Khalatnikov—18, 683 (1964) [45, 989 (1963)]

POLIKANOV, S. M.
Formation of a Spontaneously Fissioning Isomer in Reactions Involving α Particles and Deuterons. (E) G. N. Flerov, S. M. Polikanov, K. A. Gavrilov, V. L. Mikheev, V. P. Perelygin, and A. A. Pleve—18, 964 (1964) [45, 1396 (1963)]

POLIKARPOV, V. I.
An Investigation of Gamma Rays from Cs^{140}. (E) E. A. Zherebin, A. I. Krylov, V. I. Polikarpov, and N. N. Yuzvuk—18, 319 (1964) [45, 464 (1963)]

POLIVANOV, M. K.
Analytical Properties of the Amplitude in the Quasipotential Scattering Problem. (T) O. I. Zav'yalov, M. K. Polivanov, and S. S. Khoruzhiĭ—18, 1135 (1964) [45, 1654 (1963)]

POL'SKIĬ, Yu. E.
Relaxation Processes in the Paramagnetic Resonance of Gd^{3+} in CaF_2. (E) A. A. Manenkov and Yu. E. Pol'skiĭ—18, 985 (1964) [45, 1425 (1963)]

POLUBARINOV, I. V.
On Interacting Fields with Definite Spin. (T) V. I. Ogievetskiĭ and I. V. Polubarinov—18, 166 (1964) [45, 237 (1963)]

On the Theory of the Neutral Vector Field with Spin 1. (T) V. I. Ogievetskiĭ and I. V. Polubarinov—18, 487 (1964) [45, 709 (1963)]

Interacting Spin 1 Fields and Symmetry Properties. (T) V. I. Ogievetskiĭ and I. V. Polubarinov—18, 668 (1964) [45, 966 (1963)]

POLYAK, Yu. Ya.
The Effect of Collisions on the Excitation Spectrum of a System of Electrons. (T) Yu. Ya. Polyak and V. M. Eleonskiĭ—18, 114 (1964) [45, 159 (1963)]

POMANSKIĬ, A. A.
Radiation Units and Critical Energies for Various Substances. O. I. Dovzhenko and A. A. Pomanskiĭ—18, 187 (1964) [45, 268 (1963)]

POMERANCHUK, I.
On Processes Determined by Fermion Regge Poles. (T) V. Gribov, L. Okun', and I. Pomeranchuk—18, 769 (1964) [45, 1114 (1963)]

POMORSKI, L.
Two-neutron Transfer During N^{15} Ion Bombardment of Separated $Zr^{90,92,94}$ Isotopes. (E) V. V. Volkov, L. Pomorski, J. Tys, and J. Wilczynski—18, 617 (1964) [45, 897 (1963)]

PONOSOV, A. K.
Effect of the Nucleus on π^0-Meson Production. (E) V. S. Demidov, E. D. Zhizhin, V. G. Kirillov-Ugryumov, A. K. Ponosov, F. M. Sergeev, and Ya. Ya. Shalamov—18, 301 (1964) [45, 437 (1963)]

PONTECORVO, B.
Measurement of the Total Muon Capture Probability in He^3. (E) O. A. Zaĭmidoroga, M. M. Kulyukin, B. Pontecorvo, R. M. Sulyaev, I. V. Falomkin, A. I. Filippov, V. M. Tsupko-Sitnikov, and Yu. A. Shcherbakov—18, 1235 (1964) [45, 1803 (1963)]

POP, Iuliu
Some Magnetic Properties of a Gadolinium Single Crystal. (E) V. I. Chechernikov, Iuliu Pop, I. V. Burov, and E. M. Savitskiĭ—18, 595 (1964) [45, 867 (1963)]

POPOV, A. B.
Investigation of Neutron Resonances in Rh^{103}. (E) Wang Nai-yen, I. Vizi, V. N. Efimov, E. N. Karzhavina, Kim Hi San, A. B. Popov, L. B. Pikel'ner, M. I. Pshitula, T. Stadnikov, Ch'eng Ling-Yen, É. I. Sharapov, I. I. Shelontsev, N. Yu. Shirikova, and Yu. S. Yazvitskiĭ—18, 1194 (1964) [45, 1743 (1963)]

POPOV, V. A.
Measurement of the Specific Heat C_V of Oxygen Near the Critical Point. (E) A. V. Voronel', Yu. R. Chashkin, V. A. Popov, and V. G. Simkin—18, 568L (1964) [45, 828L (1963)]

POPOV, V. I.
Asymmetry of Double Scattering of Neutrons on Helium. (E) P. S. Ot-stavnov, G. N. Lovchikova, and V. I. Popov—18, 1202 (1964) [45, 1754 (1963)]

POPOVA, A. M.
Investigation of Nucleon Induced Deuteron Disintegration by the Diagram Summation Technique. (T) V. V. Komarov and A. M. Popova—18, 151 (1964) [45, 214 (1963)]

PRESNYAKOV, L.
On a Certain Model for Calculation of the Effective Cross Sections for Excitation of Atoms. (T) L. Vaĭnshtein, L. Presnyakov, and I. Sobel'man—18, 1383 (1964) [45, 2015 (1963)]

PRIVOROTSKIĬ, I. A.
The Magnetic Property of Superconductors With $l \neq 0$ Pairing. Theory of the Knight Shift. (T) I. A. Privorotskiĭ—18, 1346 (1964) [45, 1961 (1963)]

PROKHOROV, A. M.
Ruby Laser with Generation Duration of ~10 Milliseconds. (E) V. K. Konyukhov, L. A. Kulevskiĭ, and A. M. Prokhorov—18, 588 (1964) [45, 857 (1963)]

PROKHOROV, L. V.
Analytic Properties of the Forward Scattering Amplitude in the Nonlocal Theory. (T) L. V. Prokhorov—18, 542 (1964) [45, 791 (1963)]

PROKOSHKIN, Yu. D.
Measurement of the Mass Difference of Charged and Neutral Pions. (E) V. I. Petrukhin and Yu. D. Prokoshkin—18, 1190 (1964) [45, 1737 (1963)]

PROZOROVA, L. A.
Antiferromagnetic Resonance in $MnCO_3$. (E) A. S. Borovik-Romanov, N. M. Kreĭnes, and L. A. Prozorova—18, 46 (1964) [45, 64 (1963)]

PSHITULA, M. I.
Investigation of Neutron Resonances in Rh^{103}. (E) Wang Nai-yen, I. Vizi, V. N. Efimov, E. N. Karzhavina, Kim Hi San, A. B. Popov, L. B. Pikel'ner, M. I. Pshitula, T. Stadnikov, Ch'eng Ling-Yen, É. I. Sharapov, I. I. Shelontsev, N. Yu. Shirikova, and Yu. S. Yazvitskiĭ—18, 1194 (1964) [45, 1743 (1963)]

RAKOVITSKIĬ, S. L.
On the Nature of Highly Excited Levels in W^{182}. (E) S. V. Starodubtsev, R. B. Begzhanov, and S. L. Rakovitskiĭ—18, 635 (1964) [45, 921 (1963)]

RANYUK, Yu. N.
On the Mechanism of Total Nuclear Disintegration. (T) Yu. A. Berezhnoĭ, A. P. Klyucharev, Yu. N. Ranyuk, and N. Ya. Rutkevich—18, 713 (1964) [45, 1030 (1963)]

RAPOPORT, I. D.
Search for Antimatter in Cosmic Rays. (E) N. L. Grigorov, D. A. Zhuravlev, M. A. Kondrat'eva, I. D. Rapoport, and I. A. Savenko—18, 272L (1964) [45, 394L (1963)]

RAPOPORT, L. P.
Theory of Quantization of Magnetic Flux in Superconductors. (T) L. P. Rapoport—18, 1003 (1964) [45, 1453 (1963)]

RATNER, A. M.
Oscillations in the Radiation From a Laser. (T) A. M. Ratner—18, 1311 (1964) [45, 1908 (1963)]

RATYNSKIĬ, V.
Gamma Ray Spectra Following Resonance Capture of Neutrons. (E) V. Ratynskiĭ, K. G. Ignat'ev, I. V. Kirpichnikov, F. N. Belyaev, and S. I. Sukhoruchkin—18, 598 (1964) [45, 870 (1963)]

REĬNOV, N. M.
Measurement of the Nuclear Specific Heats of Iridium and Rhenium in Iron Alloys. (E) A. V. Kogan, V. D. Kul'kov, L. P. Nikitin, N. M. Reĭnov, and M. F. Stel'makh—18, 1 (1964) [45, 1 (1963)]

REKALO, M. P.
Fermion Regge Poles and the Compton Effect. (T) V. G. Gorshkov, M. P. Rekalo, and G. V. Frolov—18, 199 (1964) [45, 285 (1963)]

Polarization Phenomena in Scattering of π-Mesons on Nucleons and the Fermion Regge Poles. (T) M. P. Rekalo—18, 409 (1964) [45, 595 (1963)]

Photoproduction of π Mesons on Nucleons and Fermion Regge Poles. (T) M. P. Rekalo, V. G. Gorshkov, and G. V. Frolov—18, 462 (1964) [45, 672 (1963)]

RIDEL', K.
Screening in Pair Conversion. (T) V. G. Gorshkov and K. Ridel'—18, 1103 (1964) [45, 1603 (1963)]

RODAK, M. I.
Effect of Magnetic Resonance Saturation on Cross Relaxation. (T) M. I. Rodak—18, 500 (1964) [45, 730 (1963)]

RODE, V. E.
Investigation of the Magnetization of a Ferrite Garnet in Strong Pulsed Magnetic Fields. (E) V. E. Rode and A. V. Vedyaev—18, 286 (1964) [45, 415 (1963)]

ROĬNISHVILI, V. N.
Track Spark Chamber. (E) V. A. Mikhaĭlov, V. N. Roĭnishvili, and G. E. Chikovani—18, 561L (1964) [45, 818L (1963)]

ROZANOVA, A. M.
Observation of $K_2^0 \to \pi^+ + \pi^- + \pi^0$ Decays. (E) M. Kh. Anikina, O. N. Gogitidze, M. S. Zhuravleva, A. A. Kozlov, D. M. Kotlyarevskiĭ, Z. Sh. Mandzhavidze, A. N. Mestvirishvili, D. Neagu, E. O. Okonov, N. I. Petrov, A. M. Rozanova, V. A. Rusakov, G. G. Takhtamyshev, L. V. Chkhaidze, Wu Tsun-fan, and A. A. Tserelov—18, 323 (1964) [45, 469 (1963)]

ROZMAN, I. M.
Millisecond Thallium Isomers. (E) A. G. Demin, Yu. P. Kushakevich, E. A. Makoveev, I. M. Rozman, and A. F. Chachakov—18, 925 (1964) [45, 1344 (1963)]

New Short-lived Isomers of Ruthenium and Tellurium. (E) A. G. Demin and I. M. Rozman—18, 1417L (1964) [45, 2067L (1963)]

RUDAKOV, L. I.
Nonlinear Theory of the Drift Instability of an Inhomogeneous Plasma in a Magnetic Field. (T) A. A. Galeev and L. I. Rudakov—18, 444 (1964) [45, 647 (1963)]

RUDIK, A. P.
New Method of Investigation of Singularities of Feynman Diagrams. (T) A. P. Rudik and Yu. A. Simonov—18, 703 (1964) [45, 1016 (1963)]

RUSAKOV, V. A.
Observation of $K_2^0 \to \pi^+ + \pi^- + \pi^0$ Decays. (E) M. Kh. Anikina, O. N. Gogitidze, M. S. Zhuravleva, A. A. Kozlov, D. M. Kotlyarevskiĭ, Z. Sh. Mandzhavidze, A. N. Mestvirishvili, D. Neagu, E. O. Okonov, N. I. Petrov, A. M. Rozanova, V. A. Rusakov, G. G. Takhtamyshev, L. V. Chkhaidze, Wu Tsun-fan, and A. A. Tserelov—18, 323 (1964) [45, 469 (1963)]

RUTKEVICH, N. Ya.
On the Mechanism of Total Nuclear Disintegration. (T) Yu. A. Berezhnoĭ, A. P. Klyucharev, Yu. N. Ranyuk, and N. Ya. Rutkevich—18, 713 (1964) [45, 1030 (1963)]

Emission of Three α Particles in Interactions Between B^{10} Ions and Light Nuclei. (E) S. N. Shumilov, A. P. Klyucharev, and N. Ya. Rutkevich—18, 934 (1964) [45, 1356 (1963)]

RYAZANOV, M. I.
Ionization Losses in an Inhomogeneous Medium. (T) N. P. Kalashnikov and M. I. Ryazanov—18, 227 (1964) [45, 325 (1963)]

Emission of a Photon by a Fast Particle Interacting with Elementary Excitations in Matter. (T) M. I. Ryazanov—18, 232 (1964) [45, 333 (1963)]

RYBAKOV, V. N.
Secondary Reactions of Astatine Production During Bombardment of Bi and Pb with 3 to 10 BeV Protons. (E) N. S. Mal'tseva, V. N. Mekhedov, and V. N. Rybakov—18, 585 (1964) [45, 852 (1963)]

RYNDIN, R. M.
Relation of Total Cross Sections for $\frac{1}{2} + \frac{1}{2} \to 0 + 0$ Reactions to the Intrinsic Parities of the Particles. (T) S. M. Bilen'kiĭ and R. M. Ryndin—18, 823 (1964) [45, 1192 (1963)]

SAMOĬLOV, L. N.
Neutron Polarization in the Reactions T(p, n) He^3 and D(d, n) He^3. (E) N. V. Alekseev, U. R. Arifkhanov, N. A. Vlasov, V. V. Davydov and L. N. Samoĭlov—18, 979 (1964) [45, 1416 (1963)]

SANNIKOV, S. S.
Depolarization of Relativistic Electrons in a Magnetic Field. (T) S. S. Sannikov—18, 546 (1964) [45, 797 (1963)]

SAVENKO, I. A.
Search for Antimatter in Cosmic Rays. (E) N. L. Grigorov, D. A. Zhuravlev, M. A. Kondrat'eva, I. D. Rapoport, and I. A. Savenko—18, 272L (1964) [45, 394L (1963)]

SAVITSKIĬ, E. M.
Some Magnetic Properties of a Gadolinium Single Crystal. (E) V. I. Chechernikov, Iuliu Pop, I. V. Burov, and E. M. Savitskiĭ—18, 595 (1964) [45, 867 (1963)]

SAYASOV, Yu. S.
Scattering Theory in the Impulse Approximation. (T) G. K. Ivanov and Yu. S. Sayasov—18, 1006 (1964) [45, 1456 (1963)]

SCINTEI, N.
Scattering of Protons With Energies Below 5 MeV on Ne^{20}. (E) H. Hulubei, J. Francz, N. Martalogu, N. Scintei, M. Ivascu, A. Berinde, and I. Neamu—18, 1248 (1964) [45, 1822 (1963)]

SEDOV, V. L.
Band-structure Effect on the Angular Correlation of Annihilation Radiation in Yttrium. (E) V. L. Sedov—18, 1419L (1964) [45, 2070L (1963)]

SELEKTOR, M.
Elastic Scattering of 3.5-BeV/c π^- Mesons by Protons. (E) M. S. Aĭnutdinov, S. M. Zombkovskiĭ, A. A. Pletnikov, Ya. M. Selektor, and V. N. Shulyachenko—18, 271L (1964) [45, 392L (1963)]
Study of $\pi\pi$ Resonances in π^--p Collisions at 3.5 GeV/c. (E) M. S. Aĭnutdinov, S. M. Zombkovskiĭ, Ya. M. Selektor, and V. N. Shulyachenko—18, 1152L (1964) [45, 1682L (1963)]

SEMENENKO, E. E.
Critical Magnetic Fields of Superconducting Beryllium Films. (E) B. G. Lazarev, E. E. Semenenko, and A. I. Sudovtsov—18, 270L (1964) [45, 391L (1963)]
Temperature Dependence of the Electrical Resistance of Cobalt Between 1.3 and 4.2°K. (E) E. E. Semenenko, A. I. Sudovtsov, and N. V. Volkenshteĭn—18, 957 (1964) [45, 1387 (1963)]

SEMASHKO, G. L.
Baryon Momentum Spectrum in Inelastic Collisions Between Fast Pions and Nucleons. (T) V. S. Barashenkov, D. I. Blokhintsev, E. K. Mihul, I. Patera, and G. L. Semashko—18, 263L (1964) [45, 381L (1963)]

SERGEEV, F. M.
Effect of the Nucleus on π^0-Meson Production. (E) V. S. Demidov, E. D. Zhizhin, V. G. Kirillov-Ugryumov, A. K. Ponosov, F. M. Sergeev, and Ya. Ya. Shalamov—18, 301 (1964) [45, 437 (1963)]

SERIKOV, I. N.
(He^3, α) Reaction on C^{12} and Mg^{24} Nuclei. (E) V. M. Pankratov and I. N. Serikov—18, 627 (1964) [45, 910 (1963)]

SHAFRANOV, M. D.
Polarization in pp Scattering at 8.5 BeV. (E) V. P. Kanavets, I. I. Levintov, B. V. Morozov, and M. D. Shafranov—18, 874L (1964) [45, 1272L (1963)]

SHAFRANOVA, M. G.
Small-angle Proton-proton Elastic Scattering at 6 and 10 GeV. (E) L. F. Kirillova, V. A. Nikitin, A. A. Nomofilov, V. A. Sviridov, L. N. Strunov, and M. G. Shafranova—18, 867L (1964) [45, 1261L (1963)]

SHALAMOV, Ya. Ya.
Effect of the Nucleus on π^0-Meson Production. (E) V. S. Demidov, E. D. Zhizhin, V. G. Kirillov-Ugryumov, A. K. Ponosov, F. M. Sergeev, and Ya. Ya. Shalamov—18, 301 (1964) [45, 437 (1963)]

SHAPIRO, V. D.
Quasilinear Theory of Instability of a Plasma with an Anisotropic Ion Velocity Distribution. (T) V. D. Shapiro and V. I. Shevchenko—18, 1109 (1964) [45, 1612 (1963)]

SHARAPOV, É. I.
Neutron Resonances in Bromine. (E) D. Zeliger, N. Iliescu, Kim Hi San, D. Longo, L. B. Pikel'ner, and É. I. Sharapov—18, 889 (1964) [45, 1294 (1963)]
Investigation of Neutron Resonances in Rh^{103}. (E) Wang Nai-yen, I. Vizi, V. N. Efimov, E. N. Karzhavina, Kim Hi San, A. B. Popov, L. B. Pikel'ner, M. I. Pshitula, T. Stadnikov, Ch'eng Ling-Yen, É. I. Sharapov, I. I. Shelontsev, N. Yu. Shirikova, and Yu. S. Yazvitskiĭ—18, 1194 (1964) [45, 1743 (1963)]

SHARKHATUNYAN, R. O.
Observation of Tracks of Fast Particles in a Two-electrode Spark Chamber in a Magnetic Field. (E) A. I. Alikhanyan, T. L. Asatiani, É. M. Matevosyan, A. A. Nazaryan, and R. O. Sharkhatunyan—18, 1154L (1964) [45, 1684L (1963)]
Polarization of Cosmic Ray μ^+ Mesons. (E) T. L. Asatiani, V. M. Krishchyan, and R. O. Sharkhatunyan—18, 1176 (1964) [45, 1717 (1963)]

SHATINSKIĬ, V. M.
New Data on Alpha Decay of Americium Isotopes. (E) S. A. Baranov, V. M. Kulakov, and V. M. Shatinskiĭ—18, 1241 (1964) [45, 1811 (1963)]

SHAVROV, V. G.
Galvanomagnetic Effects in Ferrimagnetics near the Compensation Point. V. G. Shavrov and E. A. Turov—18, 242 (1964) [45, 349 (1963)]

SHAVTVALOV, L. Ya.
Investigation of Radiation from $Al^{28}m$, S^{31}, Ti^{43}, and Mn^{57}. (E) S. S. Vasil'ev and L. Ya. Shavtvalov—18, 955 (1964) [45, 1385 (1963)]

SHCHERBAKOV, Yu. A.
Measurement of the Total Muon Capture Probability in He^3. (E) O. A. Zaĭmidoroga, M. M. Kulyukin, B. Pontecorvo, R. M. Sulyaev, I. V. Falomkin, A. I. Filippov, V. M. Tsupko-Sitnikov, and Yu. A. Shcherbakov—18, 1235 (1964) [45, 1803 (1963)]

SHCHERBINA, Yu. I.
Studies of Temperature Dependence of Mössbauer Spectra of Fe^{57} and Sn^{119} in Antiferromagnetic $FeSn_2$. (E) V. I. Nikolaev, Yu. I. Shcherbina, and S. S. Yakimov—18, 878L (1964) [45, 1277L (1963)]

SHEBANOV, V. A.
Evidence for the $\omega \to \pi^0 + \gamma$ Decay. (E) V. V. Barmin, A. G. Dolgolenko, Yu. S. Krestnikov, A. G. Meshkovskiĭ, Yu. P. Nikitin, and V. A. Shebanov—18, 1289 (1964) [45, 1879 (1963)]
Search for the Decay $\omega \to e^+ + e^-$. (E) V. V. Barmin, A. G. Dolgolenko, Yu. S. Krestnikov, A. G. Meshkovskiĭ, and V. A. Shebanov—18, 1427L (1964) [45, 2082L (1963)]

SHELEPIN, L. A.
Negative Absorption in a Nonequilibrium Hydrogen Plasma. (T) L. I. Gudzenko and L. A. Shelepin—18, 998 (1964) [45, 1445 (1963)]

SHELONTSEV, I. I.
Investigation of Neutron Resonances in Rh^{103}. (E) Wang Nai-Yen, I. Vizi, V. N. Efimov, E. N. Karzhavina, Kim Hi San, A. B. Popov, L. B. Pikel'ner, M. I. Pshitula, T. Stadnikov, Ch'eng Ling-Yen, É. I. Sharapov, I. I. Shelontsev, N. Yu. Shirikova, and Yu. S. Yazvitskiĭ—18, 1194 (1964) [45, 1743 (1963)]

SHEPELEV, A. G.
Anisotropy of the Energy Gap in Superconducting Tin. (E) A. G. Shepelev—18, 1423L (1964) [45, 2076L (1963)]

SHESTOPEROV, V. Ya.
Energy Spectrum of Nuclear-active Particles in Extensive Air Showers. (E) Kh. P. Babayan, N. G. Boyadzhyan, N. L. Grigorov, É. A. Mamidzhanyan, Ch. A. Tret'yakova, and V. Ya. Shestoperov—18, 288 (1964) [45, 418 (1963)]

SHEVCHENKO, V. G.
Cross Section of the Rh^{103} (γ, p) Reaction. (E) B. S. Ishkhanov, É. N. Kornienko, Yu. I. Sorokin, V. G. Shevchenko, and B. A. Yur'ev—18, 29 (1964) [45, 38 (1963)]
Quadrupole Resonances of Atomic Nuclei. (T/E) V. G. Shevchenko, N. P. Yudin, and B. A. Yur'ev—18, 128 (1964) [45, 180 (1963)]

SHEVCHENKO, V. I.
Quasilinear Theory of Instability of a Plasma with an Anisotropic Ion Velocity Distribution. (T) V. D. Shapiro and V. I. Shevchenko—18, 1109 (1964) [45, 1612 (1963)]

SHILYAEV, B. A.
Elastic Scattering of 3.4–4.2 MeV Protons by Ni^{62} and Ni^{64} Isotopes. (E) V. Ya. Golovnya, A. P. Klyucharev, and B. A. Shilyaev—18, 1183 (1964) [45, 1727 (1963)]

SHIRIKOVA, N. Yu.
Investigation of Neutron Resonances in Rh^{103}. (E) Wang Nai-yen, I. Vizi, V. N. Efimov, E. N. Karzhavina, Kim Hi San, A. B. Popov, L. B. Pikel'ner, M. I. Pshitula, T. Stadnikov, Ch'eng Ling-Yen, É. I. Sharapov, I. I. Shelontsev, N. Yu. Shirikova, and Yu. S. Yazvitskiĭ—18, 1194 (1964) [45, 1743 (1963)]

SHISTER, A. R.
Transport Phenomena in a Plasma in a Strong Magnetic Field. (T) Yu. M. Aliev and A. R. Shister—18, 1035 (1964) [45, 1499 (1963)]

SHKLYAREVSKIĬ, G. M.
Slow π^+-Meson Capture by Light Nuclei in the Correlational Nuclear Model. (T) G. M. Shklyarevskiĭ—18, 480 (1964) [45, 698 (1963)]

SHMIDT, V. V.
Critical Current and Critical Magnetic Field in Hard Superconductors. (T) V. V. Shmidt—18, 1368 (1964) [45, 1992 (1963)]

SHOLIN, G. V.
Spectroscopic Investigation of Turbulence Heating of a Plasma. (E) S. P. Zagorodnikov, G. E. Smolkin, and G. V. Sholin—18, 1268 (1964) [45, 1850 (1963)]

SHTOL'TS, A. K.
Lifetime of the 4^+ (2310 keV) Level in Tl^{48}. (E) A. F. Akkerman, V. L. Kochetkov, V. N. Chekanov, V. V. Suvorov, and A. K. Shtol'ts—18, 1218 (1964) [45, 1778 (1963)]

SHUBNYĬ, Yu. K.
Resonance Scattering by Sn^{116} and Cu^{65} Nuclei of Gamma Rays from Solid and Liquid Sources. (E) D. K. Kaipov, Yu. K. Shubnyĭ, Yu. G. Kosyak, and R. B. Begzhanov—18, 305 (1964) [45, 443 (1963)]
Lifetime of the 0.570 MeV Level in the Te^{122} Nucleus. (E) Yu. K. Shubnyĭ—18, 316 (1964) [45, 460 (1963)]

SHULENIN, B. M.
Phase Transitions in Tellurium at High Pressures. (E) S. S. Kabalkina, L. F. Vereshchagin, and B. M. Shulenin—18, 1422L (1964) [45, 2073L (1963)]

SHULYACHENKO, V. N.
Elastic Scattering of 3.5-BeV/c π^- Mesons by Protons. (E) M. S. Aĭnutdinov, S. M. Zombkovskiĭ, A. A. Pletnikov, Ya. M. Selektor, and V. N. Shulyachenko—18, 271L (1964) [45, 392L (1963)]
Study of $\pi\pi$ Resonances in π^-–p Collisions at 3.5 GeV/c. (E) M. S. Aĭnutdinov, S. M. Zombkovskiĭ, Ya. M. Selektor, and V. N. Shulyachenko—18, 1152L (1964) [45, 1682L (1963)]

SHUMILOV, S. N.
Emission of Three α Particles in Interactions Between B^{10} Ions and Light Nuclei. (E) S. N. Shumilov, A. P. Klyucharev, and N. Ya. Rutkevich—18, 934 (1964) [45, 1356 (1963)]

SIDOROV, V. M.
Investigation of the $\pi^+\pi^-$ Interaction at Low Energy by the Chew-Low Method. (T) Yu. A. Batusov, S. A. Bunyatov, Do In Seb, V. M. Sidorov, and V. A. Yarba—18, 629 (1964) [45, 913 (1963)]

SILIN, I. N.
Phase Shift Analysis of Nucleon-nucleon Scattering at 147 MeV. (T) Yu. M. Kazarinov, V. S. Kiselev, and I. N. Silin—18, 437 (1964) [45, 637 (1963)]
Phase-shift Analysis of Elastic pp Scattering at 660 MeV with Account of Relativistic Effects. (T) R. Ya. Zul'karneev and I. N. Silin—18, 456 (1964) [45, 664 (1963)]

SILIN, V. P.
One Possibility of Plasma Instability. (T) V. P. Silin—18, 559L (1964) [45, 816L (1963)]
Contribution to the Theory of Oscillations of a Weakly Inhomogeneous Plasma. (E) V. P. Silin—18, 733 (1964) [45, 1060 (1963)]
Transition Radiation and Collective Oscillations in Metallic Films. (T) V. P. Silin and E. P. Fetisov—18, 1081 (1964) [45, 1572 (1963)]

SIMKIN, V. G.
Measurement of the Specific Heat C_V of Oxygen Near the Critical Point. (E) A. V. Voronel', Yu. R. Chashkin, V. A. Popov, and V. G. Simkin—18, 568L (1964) [45, 828L (1963)]

SIMONOV, Yu. A.
New Method of Investigation of Singularities of Feynman Diagrams. (T) A. P. Rudik and Yu. A. Simonov—18, 703 (1964) [45, 1016 (1963)]

SIMONYAN, Kh. A.
Anomalous Resonance Spin Flip of a Particle in a Magnetic Field. (T) Kh. A. Simonyan and Yu. F. Orlov—18, 123 (1964) [45, 173 (1963)]

SKOBOV, V. G.
Theory of Resonance Excitation of Weakly Decaying Electromagnetic Waves in Metals. (T) É. A. Kaner and V. G. Skobov—18, 419 (1964) [45, 610 (1963)]

SKVORTSOV, V. A.
Four-Millimeter Molecular Beam Generator Based on the 1_{01}–0_{00} Transition in the CH_2O Molecule. (E) A. F. Krupnov and V. A. Skvortsov—18, 74 (1964) [45, 101 (1963)]
A 4 mm Fabry-Perot Maser. (E) A. F. Krupnov and V. A. Skvortsov—18, 1426L (1964) [45, 2080L (1963)]

SLUTSKIN, A. A.
Motion of a One-dimensional Nonlinear Oscillator Under Adiabatic Conditions. (T) A. A. Slutskin—18, 676 (1964) [45, 978 (1963)]

SLYUSARENKO, L. I.
Elastic Scattering of Deuterons by Nitrogen, Oxygen, and Argon. (E) O. F. Nemets, F. Picard, L. I. Slyusarenko, and V. V. Tokarevskiĭ—18, 583 (1964) [45, 850 (1963)]

SMIRENKIN, G. N.
Kinetic Energy of Fragments Produced in Symmetric Fission of U^{235}. (E) P. P. D'yachenko, B. D. Kuz'minov, L. S. Kutsaeva, V. N. Okolovich, G. N. Smirenkin, and A. N. Utyuzhnikov—18, 6 (1964) [45, 8 (1963)]

SMIRNOV, B. M.
Collisions of Slow Heavy Atoms. (T) B. M. Smirnov—18, 111 (1964) [45, 155 (1963)]

SMIRNOV, Yu. F.
Determination of the Mutual Arrangement of Nucleon Associations in a Nucleus by the Directed Orbital Method. (T/E) S. Matthies, V. G. Neudachin, and Yu. F. Smirnov—18, 79 (1964) [45, 107 (1963)]

SMOLKIN, G. E.
Spectroscopic Investigation of Turbulence Heating of a Plasma. (E) S. P. Zagorodnikov, G. E. Smolkin, and G. V. Sholin—18, 1268 (1964) [45, 1850 (1963)]

SMORODIN, Yu. A.
Altitude Variation of Vertical Extensive Air Showers in the Upper Part of the Atmosphere. (E) R. A. Antonov, Yu. A. Smorodin, and Z. I. Tulinova—18, 1279 (1964) [45, 1865 (1963)]

SMORODINSKIĬ, Ya. A.
The Theory of Spiral Amplitudes. (T) Ya. A. Smorodinskiĭ—18, 415 (1964) [45, 604 (1963)]

SOBEL'MAN, I.
On a Certain Model for Calculation of the Effective Cross Sections for Excitation of Atoms. (T) L. Vaĭnshtein, L. Presnyakov, and I. Sobel'man—18, 1383 (1964) [45, 2015 (1963)]

SOLNTSEV, A. M.
Acceleration of Ions in Plasma Beams. (E) M. V. Nezlin and A. M. Solntsev—18, 576 (1964) [45, 840 (1963)]

SOLOV'EV, E. S.
Ionization of Gases by Fast Helium Atoms and Singly-charged Helium Ions. (E) E. S. Solov'ev, R. N. Il'in, V. A. Oparin, and N. V. Fedorenko—18, 342 (1964) [45, 496 (1963)]

SOLOV'EV, L. D.
The $\pi + N \rightarrow \pi + \gamma + N$ Reaction and the Constant for Pion-pion Photoproduction. (T) V. A. Meshcheryakov, L. L. Nemenov, and L. D. Solov'ev—18, 820 (1964) [45, 1188 (1963)]

Infrared Singularities of Matrix Elements in Scalar Electrodynamics. (T) L. D. Solov'ev and Yu. Ya. Yushin—18, 830 (1964) [45, 1202 (1963)]

SOLOV'EV, L. S.
Typical Structure of a Toroidal Magnetic Field. (T) A. I. Morozov and L. S. Solov'ev—18, 660 (1964) [45, 955 (1963)]

SOLOV'EV, M. I.
Λ Hyperon Production by 7–8 GeV Negative Pions in Hydrogen. (E) V. A. Belyakov, V. I. Veksler, N. M. Viryasov, I. Vrana, Kim Hi In, E. N. Kladnitskaya, A. A. Kuznetsov, A. Mikhul, Nguyen Dinh Tu, M. I. Solov'ev, T. Hofmokl, and Ch'eng Ling-Yen—18, 64 (1964) [45, 88 (1963)]

Polarization of Λ Hyperons Produced in π^--C Interactions at 7 GeV. (E) V. A. Belyakov, Wang Yung-Chang, V. I. Veksler, N. M. Viryasov, Tu Yuan-T'sai, Kim Hi In, E. M. Kladnitskaya, A. A. Kuznetsov, Nguyen Din Tu, V. I. Penev, and M. I. Solov'ev—18, 66 (1964) [45, 90 (1963)]

SOROKIN, Yu. I.
Cross Section of the Rh^{103} (γ, p) Reaction. (E) B. S. Ishkhanov, É. N. Kornienko, Yu. I. Sorokin, V. G. Shevchenko, and B. A. Yur'ev—18, 29 (1964) [45, 38 (1963)]

SOTNIKOV, S. K.
Intensities of Gamma Transitions to the Ground Rotational Band in Neutron Resonances of the $Gd^{155}(n, \gamma)Gd^{156}$ Reaction. (E) L. S. Danelyan, B. V. Efimov, S. K. Sotnikov, and V. Kakhramanov-Dzhazafirov—18, 1274 (1964) [45, 1858 (1963)]

STADNIKOV, T.
Investigation of Neutron Resonances in Rh^{103}. (E) Wang Nai-yen, I. Vizi, V. N. Efimov, E. N. Karzhavina, Kim Hi San, A. B. Popov, L. B. Pikel'ner, M. I. Pshitula, T. Stadnikov, Ch'eng Ling-Yen, É. I. Sharapov, I. I. Shelontsev, N. Yu. Shirikova, and Yu. S. Yazvitskiĭ—18, 1194 (1964) [45, 1743 (1963)]

STARODUBTSEV, S. V.
On the Nature of Highly Excited Levels in W^{182}. (E) S. V. Starodubtsev, R. B. Begzhanov, and S. L. Rakovitskiĭ—18, 635 (1964) [45, 921 (1963)]

STAROSTIN, A. N.
Optimal System of Basis Functions in the Theory of Collisions Between Electrons and Atoms. (T) B. A. Veklenko and A. N. Starostin—18, 182 (1964) [45, 260 (1963)]

STAROSTINA, L. S.
The Fermi Surface of Tungsten (E) N. V. Volkenshteĭn, V. N. Kachinskiĭ, and L. S. Starostina—18, 32 (1964) [45, 43 (1963)]

STEL'MAKH, M. F.
Measurement of the Nuclear Specific Heats of Iridium and Rhenium in Iron Alloys. (E) A. V. Kogan, V. D. Kul'kov, L. P. Nikitin, N. M. Reĭnov, and M. F. Stel'makh—18, 1 (1964) [45, 1 (1963)]

STEPANOV, K. N.
Theory of High Frequency Heating of Plasma. (T) K. N. Stepanov—18, 826 (1964) [45, 1196 (1963)]

Experimental Observation of Landau Damping in a Plasma. (E) V. V. Dolgopolov, A. I. Ermakov, N. I. Nazarov, K. N. Stepanov, and V. T. Tolok—18, 866L (1964) [45, 1260L (1963)]

STEPANOV, N. S.
Parametric Generation of Electromagnetic Waves in a Magnetoactive Plasma. (T) L. A. Ostrovskiĭ and N. S. Stepanov—18, 1018 (1964) [45, 1473 (1963)]

STOLETOV, G. D.
Phenomenological Analysis of pp Interaction at 657 MeV. I. (T/E) L. S. Azhgireĭ, N. P. Klepikov, Yu. P. Kumekin, M. G. Meshcheryakov, S. B. Nurushev, and G. D. Stoletov—18, 810 (1964) [45, 1174 (1963)]

STRAKHOVSKIĬ, G. M.
Maser With Two Resonators in Series. (E/T) N. G. Basov, A. N. Oraevskiĭ, G. M. Strakhovskiĭ, and V. M. Tatarenkov—18, 1211 (1964) [45, 1768 (1963)]

STREL'SOV, V. N.
Validity of the Doublet Symmetry Hypothesis at High Energies. (T) V. N. Strel'sov—18, 93 (1964) [45, 128 (1963)]

STREL'TSOV, I. S.
Identification of Particles by the Photographic Emulsion Technique. (E) I. Ya. Chasnikov, Z. V. Anzon, Zh. S. Takibaev, and I. S. Strel'tsov—18, 23 (1964) [45, 29 (1963)]

STRUGAL'SKIĬ, Z. S.
Fluctuations of Electron-photon Showers in Xenon. (E) B. Nichiporuk and Z. S. Strugal'skiĭ—18, 10 (1964) [45, 12 (1963)]

STRUNOV, L. N.
Small-angle Proton-proton Elastic Scattering at 6 and 10 GeV. (E) L. F. Kirillova, V. A. Nikitin, A. A. Nomofilov, V. A. Sviridov, L. N. Strunov, and M. G. Shafranova—18, 867L (1964) [45, 1261L (1963)]

STRUTINSKIĬ, V. M.
Quasistatic Drop Model of the Nucleus as an Approximation to the Statistical Model. (T) V. M. Strutinskiĭ and A. S. Tyapin—18, 664 (1964) [45, 960 (1963)]

Equilibrium Shape of a Nucleus According to the Drop Model With Variable Surface Tension. (T) V. M. Strutinskiĭ—18, 1298 (1964) [45, 1891 (1963)]

Stability of Equilibrium States of the Nucleus in the Drop Model. (T) V. M. Strutinskiĭ—18, 1305 (1964) [45, 1900 (1963)]

STUPOCHENKO, N. N.
Investigation of the De Haas-Van Alphen Effect in Bismuth at Ultra-low Temperatures. (E) N. B. Brandt, T. F. Dolgolenko, and N. N. Stupochenko—18, 908 (1964) [45, 1319 (1963)]

SUBBOTIN, V. G.
Observation of Radioactive Decay with Emission of Protons. (E) V. A. Karnaukhov, G. M. Ter-Akop'yan, L. A. Petrov, and V. G. Subbotin—18, 879L (1964) [45, 1280L (1963)]

SUDOVTSOV, A. I.
Critical Magnetic Fields of Superconducting Beryllium Films. (E) B. G. Lazarev, E. E. Semenenko, and A. I. Sudovtsov—18, 270L (1964) [45, 391L (1963)]

Temperature Dependence of the Electrical Resistance of Cobalt Between 1.3 and 4.2°K. (E) E. E. Semenenko, A. I. Sudovtsov, and N. V. Volkenshteĭn—18, 957 (1964) [45, 1387 (1963)]

SUKHOPAROV, V. A.
Effect of Pressure on the Superconducting Transition Temperature of the Alloys Nb_3Sn and Nb–Zr. (E) E. S. Itskevich, M. A. Il'ina, and V. A. Sukhoparov—18, 949 (1964) [45, 1378 (1963)]

SUKHORUCHKIN, S. I.
Gamma Ray Spectra Following Resonance Capture of Neutrons. (E) V. Ratynskiĭ, K. G. Ignat'ev, I. V. Kirpichnikov, F. N. Belyaev, and S. I. Sukhoruchkin—18, 598 (1964) [45, 870 (1963)]

Spin Dependence of Density of Resonance Levels. (E) K. G. Ignat'ev, I. V. Kirpichnikov, and S. I. Sukhoruchkin—18, 602 (1964) [45, 875 (1963)]

SULYAEV, R. M.
Measurement of the Total Muon Capture Probability in He^3. (E) O. A. Zaĭmidoroga, M. M. Kulyukin, B. Pontecorvo, R. M. Sulyaev, I. V. Falomkin, A. I. Filippov, V. M. Tsupko-Sitnikov, and Yu. A. Shcherbakov—18, 1235 (1964) [45, 1803 (1963)]

SUVOROV, V. V.
Lifetime of the 4^+ (2310 keV) Level in Ti^{48}. (E) A. F. Akkerman, V. L. Kochetkov, V. N. Chekanov, V. V. Suvorov, and A. K. Shtol'ts—18, 1218 (1964) [45, 1778 (1963)]

SVIRIDOV, V. A.
Small-angle Proton-proton Elastic Scattering at 6 and 10 GeV. (E) L. F. Kirillova, V. A. Nikitin, A. A. Nomofilov, V. A. Sviridov, L. N. Strunov, and M. G. Shafranova—18, 867L (1964) [45, 1261L (1963)]

Measurement of the Cross Section of the Reaction $C^{12}(p, pn)C^{11}$ at 9 BeV. (E) B. I. Bekker, V. S. Pantuev, V. A. Sviridov, and M. N. Khachaturyan—18, 872L (1964) [45, 1269L (1963)]

SYROVATSKIĬ, S. I.
Gamma Rays and Cyclotron Radiation X Rays of Galactic and Metagalactic Origin. (T) V. L. Ginzburg and S. I. Syrovatskiĭ—18, 245 (1964) [45, 353 (1963)]

The Energy Spectrum of Primary Cosmic Rays and Their Composition in the Ultrahigh-energy Range. (T) S. I. Syrovat-skiĭ, Yu. A. Fomin, and G. B. Khristiansen—18, 1098 (1964) [45, 1595 (1963)]

TAKHTAMYSHEV, G. G.
Observation of $K_2^0 \to \pi^+ + \pi^- + \pi^0$ Decays. (E) M. Kh. Anikina, O. N. Gogitidze, M. S. Zhuravleva, A. A. Kozlov, D. M. Kotlyarevskiĭ, Z. Sh. Mandzhavidze, A. N. Mestvirishvili, D. Neagu, E. O. Okonov, N. I. Petrov, A. M. Rozanova, V. A. Rusakov, G. G. Takhtamyshev, L. V. Chkhaidze, Wu Tsun-fan, and A. A. Tserelov—18, 323 (1964) [45, 469 (1963)]

TAKIBAEV, Zh. S.
Identification of Particles by the Photographic Emulsion Technique. (E) I. Ya. Chasnikov, Z. V. Anzon, Zh. S. Takibaev, and I. S. Strel'tsov—18, 23 (1964) [45, 29 (1963)]

TARAN, Yu. V.
Dynamic Proton Polarization at 0.5°K. (E) B. S. Neganov, L. B. Parfenov, V. I. Lushchikov, and Yu. V. Taran—18, 273L (1964) [45, 394L (1963)]

TATARENKOV, V. M.
Maser With Two Resonators in Series. (E/T) N. G. Basov, A. N. Oraevskiĭ, G. M. Strakhovskiĭ, and V. M. Tatarenkov—18, 1211 (1964) [45, 1768 (1963)]

TAVGER, B. A.
Magnetization of Thin Ferromagnetic Films at Low Temperatures. (T) V. Ya. Demikhovskiĭ and B. A. Tavger—18, 797 (1964) [45, 1156 (1963)]

TER-AKOP'YAN, G. M.
Observation of Radioactive Decay with Emission of Protons. (E) V. A. Karnaukhov, G. M. Ter-Akop'yan, L. A. Petrov, and V. G. Subbotin—18, 879L (1964) [45, 1280L (1963)]

TIMOSHEVSKIĬ, G. F.
Compound-elastic Scattering in Elastic Scattering of 5.45 MeV Protons on Nickel Isotopes. (T) G. F. Timoshevskiĭ, R. A. Vanetsian, A. P. Klyucharev, and E. D. Fedchenko—18, 1340 (1964) [45, 1951 (1963)]

TKACHENKO, V. K.
Development of Turbulence in the Presence of a Heat Flow in Helium II Within a Capillary and the Critical Velocity Problem. (E) V. K. Tkachenko—18, 1251 (1964) [45, 1827 (1963)]

TOKAREVSKIĬ, V. V.
Elastic Scattering of Deuterons by Nitrogen, Oxygen, and Argon. (E) O. F. Nemets, F. Picard, L. I. Slyusarenko, and V. V. Tokarevskiĭ—18, 583 (1964) [45, 850 (1963)]

TOLOK, V. T.
Experimental Observation of Landau Damping in a Plasma. (E) V. V. Dolgopolov, A. I. Ermakov, N. I. Nazarov, K. N. Stepanov, and V. T. Tolok—18, 866L (1964) [45, 1260L (1963)]

TRAKHTENGERTS, V. Yu.
Instability of One-dimensional Packets and Absorption of Electromagnetic Waves in a Plasma. (T) A. A. Andronov and V. Yu. Trakhtengerts—18, 698 (1964) [45, 1009 (1963)]

TRET'YAKOVA, Ch. A.
Energy Spectrum of Nuclear-active Particles in Extensive Air Showers. (E) Kh. P. Babayan, N. G. Boyadzhyan, N. L. Grigorov, É. A. Mamidzhanyan, Ch. A. Tret'yakova, and V. Ya. Shestoperov—18, 288 (1964) [45, 418 (1963)]

TRET'YAKOVA, S. P.
Half-life of a Spontaneously Fissioning Isomer. (E) V. P. Perelygin and S. P. Tret'yakova—18, 592 (1964) [45, 863 (1963)]

TSERELOV, A. A.
Observation of $K_2^0 \to \pi^+ + \pi^- + \pi^0$ Decays. (E) M. Kh. Anikina, O. N. Gogitidze, M. S. Zhuravleva, A. A. Kozlov, D. M. Kotlyarevskiĭ, Z. Sh. Mandzhavidze, A. N. Mestvirishvili, D. Neagu, E. O. Okonov, N. I. Petrov, A. M. Rozanova, V. A. Rusakov, G. G. Takhtamyshev, L. V. Chkhaidze, Wu Tsun-fan, and A. A. Tserelov—18, 323 (1964) [45, 469 (1963)]

TSINOEV, V. G.
Investigation of the Magnetostriction of the Metamagnetic Alloy $MnAu_2$. (E) V. I. Nikolaev, A. I. Karchevskiĭ, V. G. Tsinoev, and B. V. Vasil'ev—18, 331 (1964) [45, 480 (1963)]

TSUKERMAN, I. S.
Interference Phenomena in Radiative $K_{2\pi}^0$ Decays. (T) I. S. Tsukerman—18, 133 (1964) [45, 188 (1963)]

TSUPKO-SITNIKOV, V. M.
Measurement of the Total Muon Capture Probability in He^3. (E) O. A. Zaĭmidoroga, M. M. Kulyukin, B. Pontecorvo, R. M. Sulyaev, I. V. Falomkin, A. I. Filippov, V. M. Tsupko-Sitnikov, and Yu. A. Shcherbakov—18, 1235 (1964) [45, 1803 (1963)]

TSYTOVICH, V. N.
The Absorption of Electromagnetic Waves by Neutrinos. (T) V. N. Tsytovich—18, 816 (1964) [45, 1183 (1963)]

TU Yuan-T'sai
Polarization of Λ Hyperons Produced in π^--C Interactions at 7 GeV. (E) V. A. Belyakov, Wang Yung-Chang, V. I. Veksler, N. M. Viryasov, Tu Yuan-T'sai, Kim Hi In, E. M. Kladnitskaya, A. A. Kuznetsov, Nguyen Din Tu, V. I. Penev, and M. I. Solov'ev—18, 66 (1964) [45, 90 (1963)]

TULINOVA, Z. I.
Altitude Variation of Vertical Extensive Air Showers in the Upper Part of the Atmosphere. (E) R. A. Antonov, Yu. A. Smorodin, and Z. I. Tulinova—18, 1279 (1964) [45, 1865 (1963)]

TULUB, A. V.
Plasma Oscillations of π Electrons in Molecules. (T) A. V. Tulub—18, 1001 (1964) [45, 1450 (1963)]

TUMANOV, V. S.
Frequency Conversion in Quantum Systems with Discrete Energy Levels. (T/E) A. V. Voskanyan, D. N. Klyshko, and V. S. Tumanov—18, 967 (1964) [45, 1399 (1963)]

TUMANYAN, V. A.
Polarization Phenomena in the Compton Scattering on a Moving Electron and the Possibility of Obtaining Beams of Polarized Photons. F. R. Arutyunyan, I. I. Gol'dman, and V. A. Tumanyan—18, 218 (1964) [45, 312 (1963)]

The Scattering of Light by Light. (T) V. M. Arutyunyan, F. R. Arutyunyan, K. A. Ispiryan, and V. A. Tumanyan—18, 873L (1964) [45, 1270L (1963)]

TUROV, E. A.
Galvanomagnetic Effects in Ferrimagnetics near the Compensation Point. V. G. Shavrov and E. A. Turov—18, 242 (1964) [45, 349 (1963)]

TYAPIN, A. S.
Quasistatic Drop Model of the Nucleus as an Approximation to the Statistical Model. (T) V. M. Strutinskiĭ and A. S. Tyapin—18, 664 (1964) [45, 960 (1963)]

TYAPKIN, A. A.
Measurement of the Spin Correlation Coefficient in Elastic 315-MeV Proton-proton Scattering. (E) I. M. Vasilevskiĭ, V. V. Vishnyakov, É. Iliesku, and A. A. Tyapkin—18, 327 (1964) [45, 474 (1963)]

TYS, J.
Two-neutron Transfer During N^{15} Ion Bombardment of Separated $Zr^{90,92,94}$ Isotopes. (E) V. V. Volkov, L. Pomorski, J. Tys, and J. Wilczynski—18, 617 (1964) [45, 897 (1963)]

URAZAKOV, É. I.
Investigation of Transverse (Hall) Diffusion in a Plasma of Inert Gases. (E) É. I. Urazakov and V. L. Granovskiĭ—18, 883 (1964) [45, 1285 (1963)]

URBANEC, Jan
Radiative Capture of Resonance Neutrons by the Pr^{141} Nucleus. (E) Jan Urbanec—18, 68 (1964) [45, 93 (1963)]

USPENSKIĬ, A. V.
On the Theory of the Pulsations in the Output of the Ruby Laser. (T) V. V. Korobkin and A. V. Uspenskiĭ—18, 693 (1964) [45, 1003 (1963)]

UTYUZHNIKOV, A. N.
Kinetic Energy of Fragments Produced in Symmetric Fission of U^{235}. (E) P. P. D'yachenko, B. D. Kuz'minov, L. S. Kutsaeva, V. N. Okolovich, G. N. Smirenkin, and A. N. Utyuzhnikov—18, 6 (1964) [45, 8 (1963)]

VADIA, V.
Scattering of Electrons by Nuclei According to the α Particle Model of the Nucleus. (T) V. Vadia, E. Inopin, and M. Yusef—18, 802 (1964) [45, 1164 (1963)]

VAĬNSHTEĬN, L. A.
Open Resonators with Sperical Mirrors. (T) L. A. Vaĭnshteĭn—18, 471 (1964) [45, 684 (1963)]

On a Certain Model for Calculation of the Effective Cross Sections for Excitation of Atoms. (T) L. Vaĭnshtein, L. Presnyakov, and I. Sobel'man—18, 1383 (1964) [45, 2015 (1963)]

VAKS, V. G.
Regge Poles in the Nonrelativistic Problem with Nonlocal and Singular Interaction. (T) V. G. Vaks and A. I. Larkin—18, 548 (1964) [45, 800 (1963)]

Amplitude Singularities at $l = -1$ in the Bethe-Salpeter Equations. (T) V. G. Vaks and A. I. Larkin—18, 751 (1964) [45, 1087 (1963)]

VANETSIAN, R. A.
Compound-elastic Scattering in Elastic Scattering of 5.45 MeV Protons on Nickel Isotopes. (T) G. F. Timoshevskiĭ, R. A. Vanetsian, A. P. Klyucharev, and E. D. Fedchenko—18, 1340 (1964) [45, 1951 (1963)]

VANGAĬ, A. D.
Investigation of the Decay of Eu^{147} and Eu^{148} by the Sum Coincidence Method. (E) V. R. Burmistrov and A. D. Vangaĭ—18, 951 (1964) [45, 1380 (1963)]

VARTANOV, N. A.
Determination of the Ratio of the Probabilities for Electron Capture and Positron Decays of Sb^{115} With the Aid of a Scintillation Gamma Spectrometer. (E) N. A. Vartanov—18, 1286 (1964) [45, 1875 (1963)]

VARTAPETYAN, G. A.
Collective Effects in the Cs^{131} Nucleus. (E) G. A. Vartapetyan, A. G. Khudaverdyan, and T. A. Garibyan—18, 1178 (1964) [45, 1720 (1963)]

VASIL'EV, B. V.
Investigation of the Magnetostriction of the Metamagnetic Alloy $MnAu_2$. (E) V. I. Nikolaev, A. I. Karchevskiĭ, V. G. Tsinoev, and B. V. Vasil'ev—18, 331 (1964) [45, 480 (1963)]

VASIL'EV, S. S.
Investigation of Radiation from $Al^{26}m$, S^{31}, Ti^{43}, and Mn^{57}. (E) S. S. Vasil'ev and L. Ya. Shavtvalov—18, 955 (1964) [45, 1385 (1963)]

VASIL'EVA, R. P.
Degree of Localization of Magnetic Electrons and the Nernst-Ettingshausen Effect in Ferromagnetic Metals. (E) E. I. Kondorskiĭ and R. P. Vasil'eva—18, 277 (1964) [45, 401 (1963)]

VASILEVSKIĬ, I. M.
Measurement of the Spin Correlation Coefficient in Elastic 315-MeV Proton-proton Scattering. (E) I. M. Vasilevskiĭ, V. V. Vishnyakov, É. Iliesku, and A. A. Tyapkin—18, 327 (1964) [45, 474 (1963)]

VEDYAEV, A. V.
Investigation of the Magnetization of a Ferrite Garnet in Strong Pulsed Magnetic Fields. (E) V. E. Rode and A. V. Vedyaev—18, 286 (1964) [45, 415 (1963)]

VEKLENKO, B. A.
Optimal System of Basis Functions in the Theory of Collisions Between Electrons and Atoms. (T) B. A. Veklenko and A. N. Starostin—18, 182 (1964) [45, 260 (1963)]

VEKSLER, V. I.
A Hyperon Production by 7—8 GeV Negative Pions in Hydrogen. (E) V. A. Belyakov, V. I. Veksler, N. M. Viryasov, I. Vrana, Kim Hi In, E. N. Kladnitskaya, A. A. Kuznetsov, A. Mikhul, Nguyen Dinh Tu, M. I. Solov'ev, T. Hofmokl, and Ch'eng Ling-Yen—18, 64 (1964) [45, 88 (1963)]

Polarization of Λ Hyperons Produced in π^--C Interactions at 7 GeV. (E) V. A. Belyakov, Wang Yung-Chang, V. I. Veksler, N. M. Viryasov, Tu Yuan-T'sai, Kim Hi In, E. M. Kladnitskaya, A. A. Kuznetsov, Nguyen Din Tu, V. I. Penev, and M. I. Solov'ev—18, 66 (1964) [45, 90 (1963)]

VERESHCHAGIN, L. F.

Phase Transitions in Tellurium at High Pressures. (E) S. S. Kabalkina, L. F. Vereshchagin, and B. M. Shulenin—18, 1422L (1964) [45, 2073L (1963)]

VIRYASOV, N. M.

Λ Hyperon Production by 7—8 GeV Negative Pions in Hydrogen. (E) V. A. Belyakov, V. I. Veksler, N. M. Viryasov, I. Vrana, Kim Hi In, E. N. Kladnitskaya, A. A. Kuznetsov, A. Mikhul, Nguyen Dinh Tu, M. I. Solov'ev, T. Hofmokl, and Ch'eng Ling-Yen—18, 64 (1964) [45, 88 (1963)]

Polarization of Λ Hyperons Produced in π^--C Interactions at 7 GeV. (E) V. A. Belyakov, Wang Yung-Chang, V. I. Veksler, N. M. Viryasov, Tu Yuan-T'sai, Kim Hi In, E. M. Kladnitskaya, A. A. Kuznetsov, Nguyen Din Tu, V. I. Penev, and M. I. Solov'ev—18, 66 (1964) [45, 90 (1963)]

VISHNYAKOV, V. V.

Measurement of the Spin Correlation Coefficient in Elastic 315-MeV Proton-proton Scattering. (E) I. M. Vasilevskiĭ, V. V. Vishnyakov, É. Iliesku, and A. A. Tyapkin—18, 327 (1964) [45, 474 (1963)]

VIZI, I.

Investigation of Neutron Resonances in Rh^{103}. (E) Wang Nai-yen, I. Vizi, V. N. Efimov, E. N. Karzhavina, Kim Hi San, A. B. Popov, L. B. Pikel'ner, M. I. Pshitula, T. Stadnikov, Ch'eng Ling-Yen, É. I. Sharapov, I. I. Shelomtsev, N. Yu. Shirikova, and Yu. S. Yazvitskiĭ—18, 1194 (1964) [45, 1743 (1963)]

VLADIMIROV, Yu. S.

Gravitational Transmutations of Fermions. (T) Yu. S. Vladimirov—18, 176 (1964) [45, 251 (1963)]

VLASOV, N. A.

Spatial Correlation of Nucleons in Light Nuclei. (T/E) N. A. Vlasov—18, 160 (1964) [45, 228 (1963)]

Neutron Polarization in the Reactions T(p, n) He^3 and D(d, n) He^3. (E) N. V. Alekseev, U. R. Arifkhanov, N. A. Vlasov, V. V. Davydov and L. N. Samoĭlov—18, 979 (1964) [45, 1416 (1963)]

VOLKENSHTEĬN, N. V.

The Fermi Surface of Tungsten (E) N. V. Volkenshteĭn, V. N. Kachinskiĭ, and L. S. Starostina—18, 32 (1964) [45, 43 (1963)]

Temperature Dependence of the Electrical Resistance of Cobalt Between 1.3 and 4.2°K. (E) E. E. Semenenko, A. I. Sudovtsov, and N. V. Volkenshteĭn—18, 957 (1964) [45, 1387 (1963)]

VOLKOV, D. V.

Factorization at the Regge Pole of Scattering Amplitudes of Particles with Spin. (T) D. V. Volkov—18, 509 (1964) [45, 742 (1963)]

VOLKOV, V. V.

Two-neutron Transfer During N^{15} Ion Bombardment of Separated $Zr^{90,92,94}$ Isotopes. (E) V. V. Volkov, L. Pomorski, J. Tys, and J. Wilczynski—18, 617 (1964) [45, 897 (1963)]

VOLOTSKAYA, V. G.

Deviation from Kohler's Rule in Pure Aluminum. (E) E. S. Borovik, V. G. Volotskaya, and N. Ya. Fogel'—18, 34 (1964) [45, 46 (1963)]

Galvanomagnetic Properties of Indium in Strong Effective Fields. (E) V. G. Volotskaya—18, 36 (1964) [45, 49 (1963)]

VORONEL', A. V.

Measurement of the Specific Heat C_V of Oxygen Near the Critical Point. (E) A. V. Voronel', Yu. R. Chashkin, V. A. Popov, and V. G. Simkin—18, 568L (1964) [45, 828L (1963)]

VOSKANYAN, A. V.

Frequency Conversion in Quantum Systems with Discrete Energy Levels. (T/E) A. V. Voskanyan, D. N. Klyshko, and V. S. Tumanov—18, 967 (1964) [45, 1399 (1963)]

VRANA, I.

Λ Hyperon Production by 7—8 GeV Negative Pions in Hydrogen. (E) V. A. Belyakov, V. I. Veksler, N. M. Viryasov, I. Vrana, Kim Hi In, E. N. Kladnitskaya, A. A. Kuznetsov, A. Mikhul, Nguyen Dinh Tu, M. I. Solov'ev, T. Hofmokl, and Ch'eng Ling-Yen—18, 64 (1964) [45, 88 (1963)]

WANG Nai-yen

Investigation of Neutron Resonances in Rh^{103}. (E) Wang Nai-yen, I. Vizi, V. N. Efimov, E. N. Karzhavina, Kim Hi San, A. B. Popov, L. B. Pikel'ner, M. I. Pshitula, T. Stadnikov, Ch'eng Ling-Yen, É. I. Sharapov, I. I. Shelomtsev, N. Yu. Shirikova, and Yu. S. Yazvitskiĭ—18, 1194 (1964) [45, 1743 (1963)]

WANG Yung-Chang

Polarization of Λ Hyperons Produced in π^--C Interactions at 7 GeV. (E) V. A. Belyakov, Wang Yung-Chang, V. I. Veksler, N. M. Viryasov, Tu Yuan-T'sai, Kim Hi In, E. M. Kladnitskaya, A. A. Kuznetsov, Nguyen Din Tu, V. I. Penev, and M. I. Solov'ev—18, 66 (1964) [45, 90 (1963)]

WILCZYNSKI, J.

Two-neutron Transfer During N^{15} Ion Bombardment of Separated $Zr^{90,92,94}$ Isotopes. (E) V. V. Volkov, L. Pomorski, J. Tys, and J. Wilczynski—18, 617 (1964) [45, 897 (1963)]

WOJEWODA, H.

Post-Newtonian Equations of Motion and the Harmonicity Conditions in the Theory of Gravitation. (T) H. Wojewoda—18, 1408 (1964) [45, 2051 (1963)]

WU Tsun-fan

Observation of $K_1^0 \to \pi^+ + \pi^- + \pi^0$ Decays. (E) M. Kh. Anikina, O. N. Gogitidze, M. S. Zhuravleva, A. A. Kozlov, D. M. Kotlyarevskiĭ, Z. Sh. Mandzhavidze, A. N. Mestvirishvili, D. Neagu, E. O. Okonov, N. I. Petrov, A. M. Rozanova, V. A. Rusakov, G. G. Takhtamyshev, L. V. Chkhaidze, Wu Tsun-fan, and A. A. Tserelov—18, 323 (1964) [45, 469 (1963)]

YAKIMOV, S. S.

Studies of Temperature Dependence of Mössbauer Spectra of Fe^{57} and Sn^{119} in Antiferromagnetic $FeSn_2$. (E) V. I. Nikolaev, Yu. I. Shcherbina, and S. S. Yakimov—18, 875L (1964) [45, 1277L (1963)]

YAKOVLEV, V. P.

Determination of the Interaction Between Nucleons from Electron Scattering by Nuclei. (T) V. P. Yakovlev—18, 840 (1964) [45, 1218 (1963)]

YAKOVLEV, Yu. P.

Formation of Fast Residual Nuclei. (E) V. I. Bogatin, O. V. Lozhkin, and Yu. P. Yakovlev—18, 1420L (1964) [45, 2072L (1963)]

YANKOV, V. V.

Electrodynamic Interaction of a Group of Charges During the Scattering of Radiation. (T) V. V. Yankov—18, 1122 (1964) [45, 1634 (1963)]

YARBA, V. A.

Investigation of the $\pi^+\pi^-$ Interaction at Low Energy by the Chew-Low Method. (T) Yu. A. Batusov, S. A. Bunyatov, Do In Seb, V. M. Sidorov, and V. A. Yarba—18, 629 (1964) [45, 913 (1963)]

Spectra of Charged Mesons Emitted at 90° in np Collisions Involving 600 MeV Neutrons. (E) K. O. Oganesyan and V. A. Yarba—18, 1257 (1964) [45, 1835 (1963)]

YATSENKO, A. A.
Structure of Singularities and Their Motion in Nonlinear Electrodynamics. (T) S. V. Peletminskiĭ and A. A. Yatsenko—18, 1117 (1964) [45, 1625 (1963)]

YAZVITSKIĬ, Yu. S.
Investigation of Neutron Resonances in Rh^{103}. (E) Wang Nai-yen, I. Vizi, V. N. Efimov, E. N. Karzhavina, Kim Hi San, A. B. Popov, L. B. Pikel'ner, M. I. Pshitula, T. Stadnikov, Ch'eng Ling-Yen, É. I. Sharapov, I. I. Shelontsev, N. Yu. Shirikova, and Yu. S. Yazvitskiĭ—18, 1194 (1964) [45, 1743 (1963)]

YUDIN, N. P.
Quadrupole Resonances of Atomic Nuclei. (T/E) V. G. Shevchenko, N. P. Yudin, and B. A. Yur'ev—18, 128 (1964) [45, 180 (1963)]

YUR'EV, B. A.
Cross Section of the Rh^{103} (γ, p) Reaction. (E) B. S. Ishkhanov, É. N. Kornienko, Yu. I. Sorokin, V. G. Shevchenko, and B. A. Yur'ev—18, 29 (1964) [45, 38 (1963)]

Quadrupole Resonances of Atomic Nuclei. (T/E) V. G. Shevchenko, N. P. Yudin, and B. A. Yur'ev—18, 128 (1964) [45, 180 (1963)]

YUSEF, M.
Scattering of Electrons by Nuclei According to the α Particle Model of the Nucleus. (T) V. Vadia, E. Inopin, and M. Yusef—18, 802 (1964) [45, 1164 (1963)]

YUSHIN, Yu. Ya.
Infrared Singularities of Matrix Elements in Scalar Electrodynamics. (T) L. D. Solov'ev and Yu. Ya. Yushin—18, 830 (1964) [45, 1202 (1963)]

YUZVUK, N. N.
An Investigation of Gamma Rays from Cs^{140}. (E) E. A. Zherebin, A. I. Krylov, V. I. Polikarpov, and N. N. Yuzvuk—18, 319 (1964) [45, 464 (1963)]

ZAGORODNIKOV, S. P.
Spectroscopic Investigation of Turbulence Heating of a Plasma. (E) S. P. Zagorodnikov, G. E. Smolkin, and G. V. Sholin—18, 1268 (1964) [45, 1850 (1963)]

ZAIKA, N. I.
Measurement of Asymmetry in the N^{14} (d, p) N^{15} Reaction with Elastically Scattered Deuterons. (E) Yu. V. Gofman, V. N. Dobrikov, N. I. Zaika, A. V. Mokhnach, and O. F. Nemets—18, 906 (1964) [45, 1317 (1963)]

ZAĬMIDOROGA, O. A.
Measurement of the Total Muon Capture Probability in He^3. (E) O. A. Zaĭmidoroga, M. M. Kulyukin, B. Pontecorvo, R. M. Sulyaev, I. V. Falomkin, A. I. Filippov, V. M. Tsupko-Sitnikov, and Yu. A. Shcherbakov—18, 1235 (1964) [45, 1803 (1963)]

ZAĬTSEV, A. A.
Instability of a Plasma in a Magnetic Field Upon Transition From Low to High Pressures. (E) A. R. Akhmedov and A. A. Zaĭtsev—18, 977 (1964) [45, 1414 (1963)]

ZAĬTSEV, G. A.
Static Skin Effect in Single-crystal Samples of Cadmium. (E) G. A. Zaĭtsev—18, 870L (1964) [45, 1266L (1963)]

ZASTAVENKO, L.
Effect of External Fields on Angular Correlations in Consecutive Electromagnetic Transitions. (T) L. Zastavenko and M. Podgoretskiĭ—18, 485 (1964) [45, 706 (1963)]

ZAVARITSKIĬ, N. V.
A Study of Superconducting Tin by the Tunnel Effect. (E) N. V. Zavaritskiĭ—18, 1260 (1964) [45, 1839 (1963)]

ZAV'YALOV, O. I.
Analytical Properties of the Amplitude in the Quasipotential Scattering Problem. (T) O. I. Zav'yalov, M. K. Polivanov, and S. S. Khoruzhiĭ—18, 1135 (1964) [45, 1654 (1963)]

ZEL'DOVICH, Ya. B.
The Energy of Accidental Motions in the Expanding Universe. (T) N. A. Dmitriev and Ya. B. Zel'dovich—18, 793 (1964) [45, 1150 (1963)]

ZELIGER, D.
Neutron Resonances in Bromine. (E) D. Zeliger, N. Iliescu, Kim Hi San, D. Longo, L. B. Pikel'ner, and É. I. Sharapov—18, 889 (1964) [45, 1294 (1963)]

ZHDANOV, A. P.
Decay of Residual Nuclei Produced in the Interaction of 660-MeV Protons with Carbon Nuclei. (E) A. P. Zhdanov and P. I. Fedotov—18, 313 (1964) [45, 455 (1963)]

ZHEREBIN, E. A.
An Investigation of Gamma Rays from Cs^{140}. (E) E. A. Zherebin, A. I. Krylov, V. I. Polikarpov, and N. N. Yuzvuk—18, 319 (1964) [45, 464 (1963)]

ZHIZHIN, E. D.
Effect of the Nucleus on π^0-Meson Production. (E) V. S. Demidov, E. D. Zhizhin, V. G. Kirillov-Ugryumov, A. K. Ponosov, F. M. Sergeev, and Ya. Ya. Shalamov—18, 301 (1964) [45, 437 (1963)]

Regge Poles in Photoproduction Amplitude. (E) A. V. Berkov, E. D. Zhizhin, V. D. Mur, and Yu. P. Nikitin—18, 1091 (1964) [45, 1585 (1963)]

ZHURAVLEV, D. A.
Search for Antimatter in Cosmic Rays. (E) N. L. Grigorov, D. A. Zhuravlev, M. A. Kondrat'eva, I. D. Rapoport, and I. A. Savenko—18, 272L (1964) [45, 394L (1963)]

ZHURAVLEVA, M. S.
Observation of $K_2^0 \to \pi^+ + \pi^- + \pi^0$ Decays. (E) M. Kh. Anikina, O. N. Gogitidze, M. S. Zhuravleva, A. A. Kozlov, D. M. Kotlyarevskiĭ, Z. Sh. Mandzhavidze, A. N. Mestvirishvili, D. Neagu, E. O. Okonov, N. I. Petrov, A. M. Rozanova, V. A. Rusakov, G. G. Takhtamyshev, L. V. Chkhaidze, Wu Tsun-fan, and A. A. Tserelov—18, 323 (1964) [45, 469 (1963)]

ZOMBKOVSKIĬ, S. M.
Elastic Scattering of 3.5-BeV/c π^- Mesons by Protons. (E) M. S. Aĭnutdinov, S. M. Zombkovskiĭ, A. A. Pletnikov, Ya. M. Selektor, and V. N. Shulyachenko—18, 271L (1964) [45, 392L (1963)]

Study of $\pi\pi$ Resonances in π^--p Collisions at 3.5 GeV/c. (E) M. S. Aĭnutdinov, S. M. Zombkovskiĭ, Ya. M. Selektor, and V. N. Shulyachenko—18, 1152L (1964) [45, 1682L (1963)]

ZRELOV, V. P.
Intensity of Cerenkov Radiation with Dispersion Taken into Account. (T) V. P. Zrelov—18, 203 (1964) [45, 291 (1963)]

ZUL'KARNEEV, R.
Contribution of ^3P and ^3F Waves to Meson Production in 660-MeV pp-collisions. (T/E) I. Bystritskiĭ and R. Zul'karneev—18, 806 (1964) [45, 1169 (1963)]

Phase-shift Analysis of Elastic pp Scattering at 660 MeV with Account of Relativistic Effects. (T) R. Ya. Zul'karneev and I. N. Silin—18, 456 (1964) [45, 664 (1963)]

ERRATA

Volume 16 (Russ. v. 43)

No. 1, p. 81 (Russ. p. 112), article by B. M. Smirnov.

The article contains an error. In the calculation of the matrix element $(\partial H/\partial t)_{km}$ contained in the formula of the adiabatic perturbation theory, an error was made in the sign of one of the terms, leading to a non-zero result, and the order of the expansion in the small parameter is lower than actual. A corrected paper will be published in "Optika i spekroskopiya."

Volume 17 (Russ. v. 44)

No. 2, p. 518 (Russ. p. 766), article by E. P. Shabalin

Right hand side of Eq. (3) should read

$$\frac{f_1 f_2 G^2 \sin(\varphi_0 - \varphi_1)}{2^8 \pi^4 7!! M} (Q^2 - 4m^2)(M - Q)^5 \left(1 + \frac{5Q}{M} + \frac{Q^2}{M^2}\right)$$

No. 5 p. 999 (Russ. p. 1485), article by D. K. Kopylova et al.

Caption to Fig. 7 should read:

Distribution of two-prong stars by "target mass": Continuous histogram - cases with $M_X^2 > 0$, dashed - with $M_X^2 < 0$.

Volume 18 (Russ. v. 45)

No. 4, p. 1100 (Russ. p. 1598), article by S. I. Syrovat-skiĭ et al.

Values of the fragmentation coefficient: in place of $a_{321} = -4.3618$ read $a_{321} = -3.3618$.